Version 1.8.9

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Introduction

After growing up racing motorcycles with my dad and taking a break to get a degree in engineering, I have been heavily involved in off road racing for the past 5 years. Not just showing up on the weekend and racing, but promoting or helping promote many races, serving as the Webmaster and Scoring Chairman for the Black Jack Enduro Circuit, and assisting other local hare scramble circuits in their pursuit of computerized scoring and real-time dynamic web based results.

When I first got back into the scene, I was appalled that my beloved Black Jack Enduro Circuit was still in the Stone Age and tallying results by hand, with results not being posted on the website for weeks after the event. Having been programming windows applications, designing relational databases, and building dynamic script based websites and applications for years, I of course knew that a better mousetrap, or in this case, ~A~ mousetrap, could be built!

Well I built that mousetrap and it worked great. I had four good years with that application. I was getting asked a lot by other circuits if they could use it. Problem was, I never intended for it to be used by anyone else. So lots of features that would need to be added or customizable to handle the way different circuits do things just weren't there. Nor were those features going to be there easily. Seeing the demand for a good and complete scoring package, I decided to build a ~better~ mousetrap.

MotoTally ~is~ that better mousetrap. With MotoTally the slate was wiped clean. Developed with Microsoft's latest application development tool, Visual Studio .NET 2.0, MotoTally gets the maturity of my experiences in scoring off road events. It has been in development since early 2006, designed from the ground up to be very flexible. Designed for maximum efficiency, as few mouse clicks as possible, as idiot proof as possible, yet flexible enough to work with many different sets of rules. I believe that MotoTally is the most complete and easiest to use piece of scoring software out there for everything from signup at the first race of the year all the way to handing out your year-end awards! I am always looking for ways to enhance and streamline MotoTally, so don't be afraid to ask for new features or suggest improvements.

I will now dispense with the blathering so we can roll up our sleeves and get down to it!

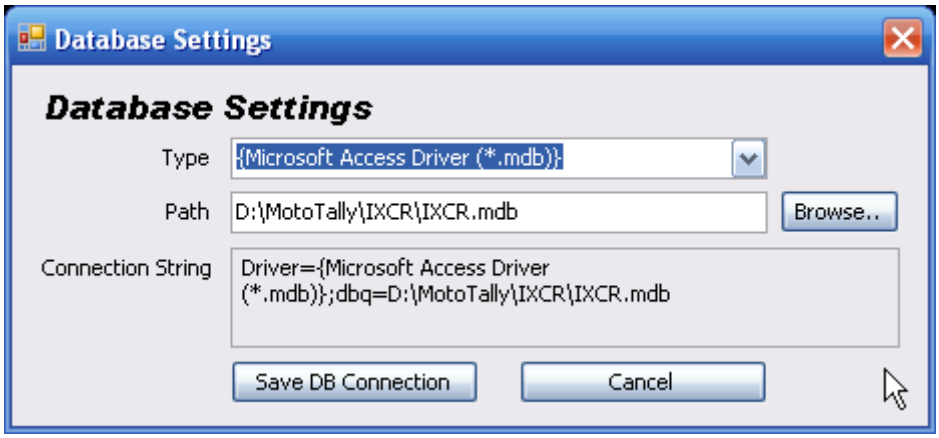
Getting Started

Application Startup

After installing MotoTally, you should have a shortcut on your desktop and in your Programs menu. You will also need to download your database. Put it somewhere that you can get too easily. I would recommend making a folder on your C:\ drive and sticking it there. Once you have MotoTally installed and your database saved somewhere easy to get to, double click on the MotoTally icon on your desktop to get started.

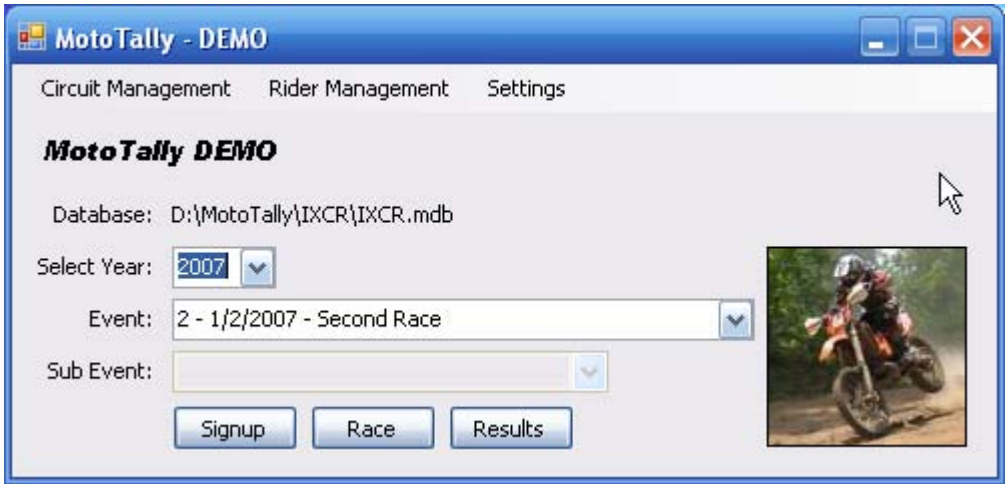
Database Settings

Starting MotoTally for the first time will most likely give you an *Error Connecting to Database* box! Don't fret! This is normal. Just click [OK] and the *Database Settings* form will come up.



Remember where you saved your database? Good. Just click [Browse…] and navigate to that location then click [Open]. Click [Save DB Connection] and MotoTally will inform you that it will restart with the new database settings.

MotoTally's Main Form



Let's do a quick overview of MotoTally's main form before we get too carried away. The menu bar up top has three different menus: *[Circuit Management], [Rider Management], and [Settings]*. We will get into these in detail shortly, but for now let's just say that in general, stuff in these menus are not needed on race day. You

can probably safely tell your race day help that they don't need to mess with anything up there, or they might mess something up!

Down on the main form we see the path to the database. Handy for those of you that will be using multiple databases. Then you have a *Select Year* pull down box, an *Event* pull down box, and a *Sub Event* pull down box. These should be fairly intuitive. Just select the year of the season you want to deal with, the event you want to deal with, and (if necessary) the sub event you want to deal with. When you first open MotoTally it will find the race that is closest to today's current date and automatically select that year and event. Remember when I said I don't like mouse clicks? I was serious!

You might use multiple databases if you have a peewee series that you want to keep riders/points/bike numbers separate from the big kids (adults)… for example…

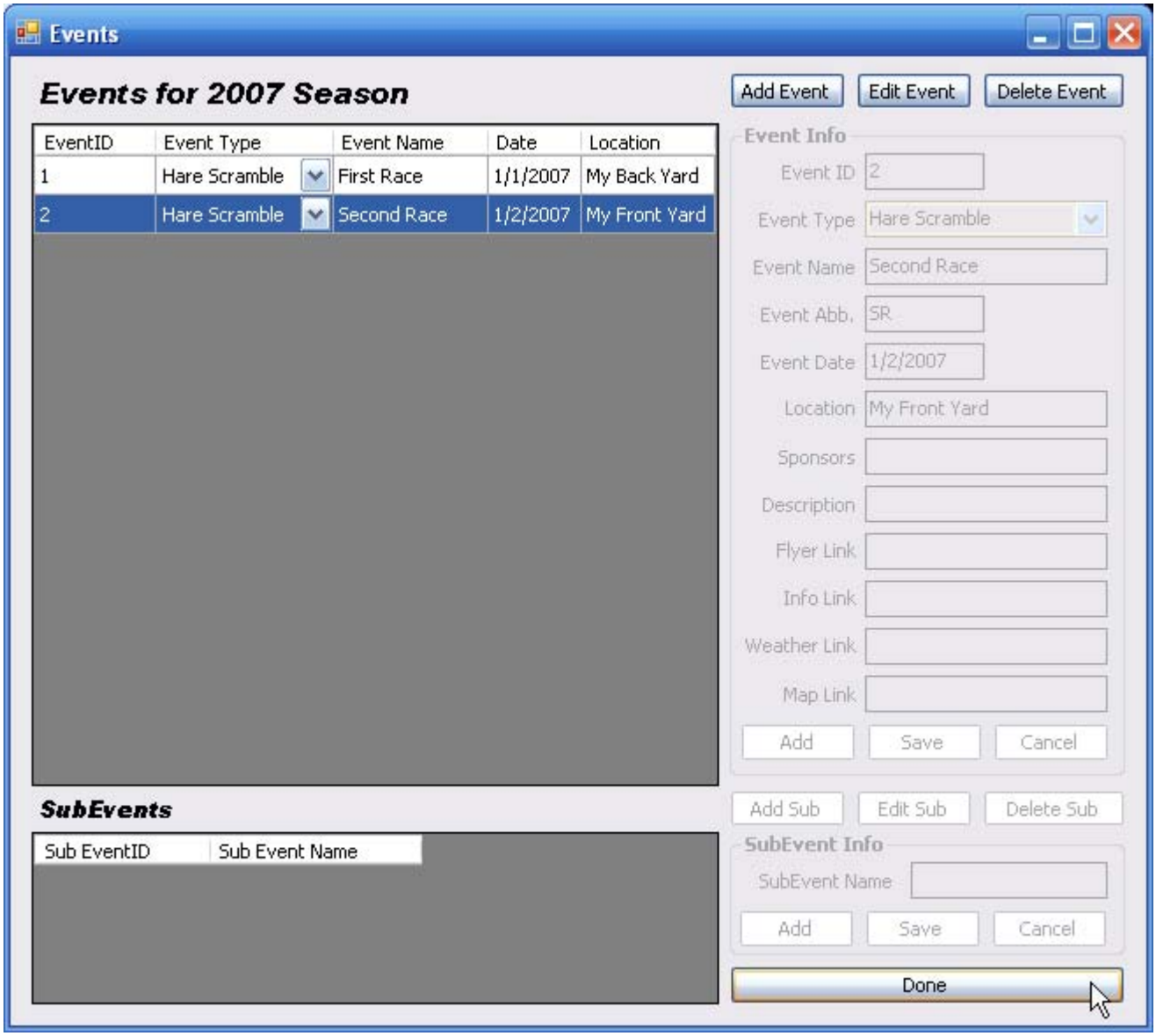
Below the pull down boxes are three more buttons: *Signup, Race, and Results.* You can probably deduce what each of these buttons do. *[Signup]* opens a form that lets you search for riders to enter in the race, add new riders to the database, and enter folks in the race along with a few other things. After signup, *[Race]* opens a form that allows you to set the start time for the event and start collecting riders' bike numbers as they pass through the scoring gate. After the race is over, *[Results]* lets you view and modify bike numbers and/or the raw lap times for each pass through the scoring gate, calculate placements for the race, and view and print results.

But before we can score any races, we need to do some setup!

Initial/Season Setup

We will take just a little time to get going here early on, but after that its smooth sailing. I like to minimize the amount of time spent before, during, and after a race on the computer. It's easier to get all this filled out in advance at the start of the season, and then be ready to run for the whole year.

Events



First, let's get all the events for this season in there. Looking to the menus up top of MotoTally's main form, select *[Circuit Management] → [Events…].* Here we can add, edit, and delete events for the season. To add an event, just click [Add Event] and start typing. EventID must be unique and is required. Just number the EventID in the order you want your Events to show up (chronological order makes the most sense to me). Other required fields are the Event Type, Event Name, Event Abb., and Event Date. Event Abb. is the event abbreviation which will be used in many places throughout

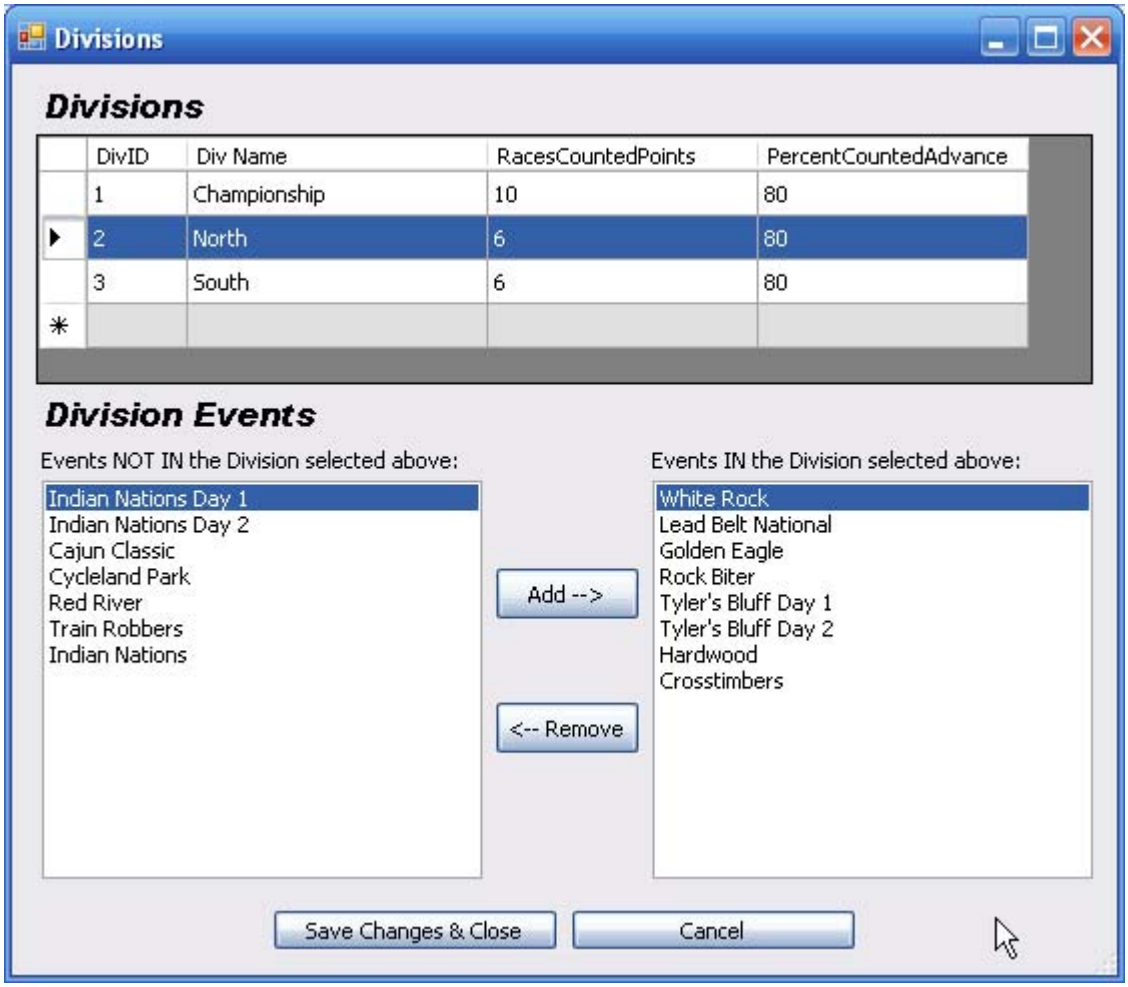
In general, any field that you will supply that ends in "ID" is required and must be unique!

Sub Events are used only for Gran Prix style events, where you have multiple motos. Enduros and Harescrambles won't use sub events.

MotoTally and on the website. Keep it as short as possible, preferably 2 or 3 characters. When you are done, click *[Done].*

Divisions

Looking to the menus at the top of MotoTally's main form, select *[Circuit Management]* → *[Divisions…]* to open up the *Divisions* form.



Divisions are a somewhat abstract concept that I introduced to handle a bunch of different scenarios. Let's start simple. For the vast majority of you, only one Division will be required, and it will need a *DivID* of 0. This is the default setting. If you specify (or leave as the default), a single Division with a *DivID* of 0, then ALL events you define will count for season points. If this is what you require, then you need to do nothing more on this form except specify the number of races that will count for points. If you have 13 races for the season and you only want 10 to count (effectively allowing three drops), then put a 10 in the *RacesCountedPoints* column. Alternatively, if you want ALL of your races to count, with no drops, then you would put the total number of races for the season in this column (13 in our example here). The *PercentCountedAdvance* column is used to specify the minimum percentage of races counted for Advancement Percentiles (an advanced topic, which will be covered later).

Now let's get fancy. Let's say you have a few other events on your schedule that you wish to score, but you don't want to have counted for season points. In this case, change the DivID to 1. You will now be able to add and remove races from this division, or more specifically, specify which races you want to count for points. All

of the events will show up in the left hand list. Just select each one you want to have counted for points and click the *[Add →]* button. Those events will be moved to the right hand column, which means they will be counted for points.

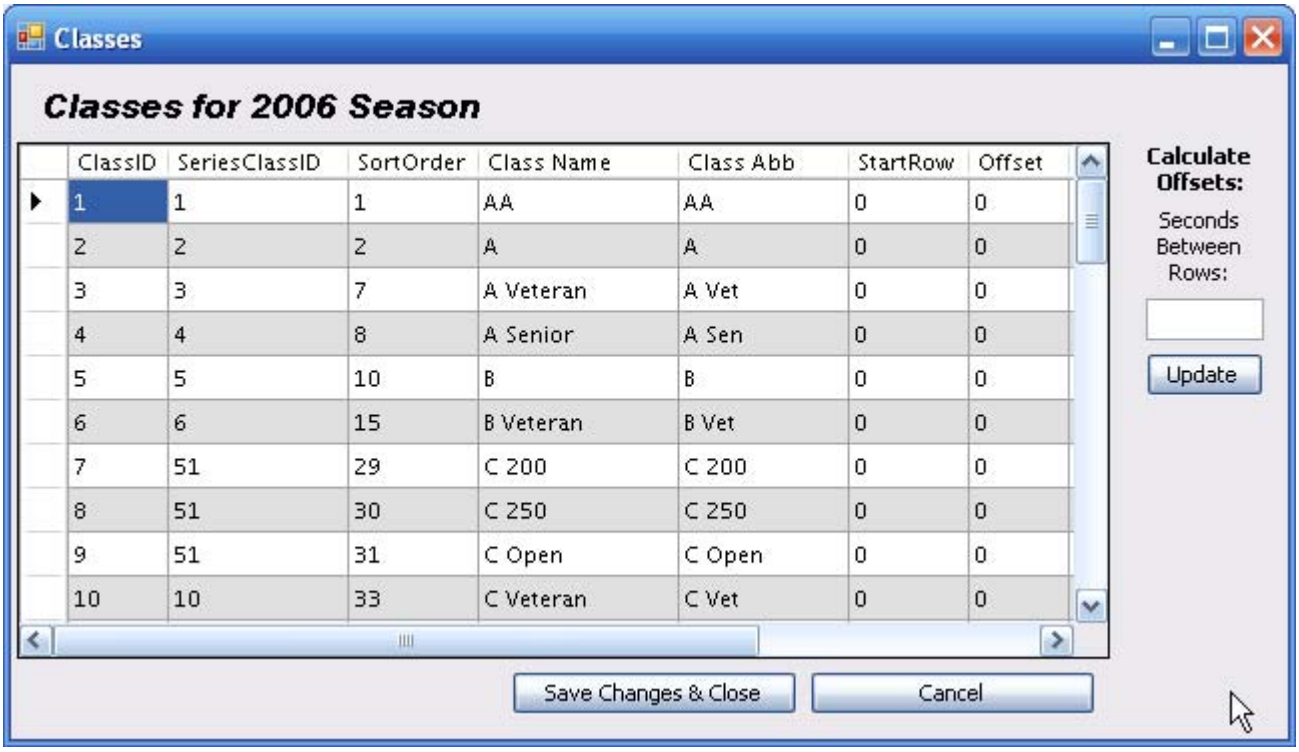
Now let's get even fancier. Let's say you have regional divisions that you wish to keep separate points for. Now define extra Divisions as needed. As you can see in the screen shot above, I have three divisions defined, a Championship, a North, and a South division. I have added certain events from the list to each of these Divisions and now I can keep track of points separately for each of these "mini" series.

Advancement Classes

For now, I am going to skip this advanced topic…

Classes

Looking to the menus at the top of MotoTally's main form, select *[Circuit Management]* → *[Classes…]* to open up the *Classes* form.


Classes
Classes for 2006 Season
ClassID SeriesClassID SortOrder Class Name Class Abb StartRow Offset
1 1 1 AA AA 0 0
2 2 2 A A 0 0
3 3 7 A Veteran A Vet 0 0
4 4 8 A Senior A Sen 0 0
5 5 10 B B 0 0
6 6 15 B Veteran B Vet 0 0
7 51 29 C 200 C 200 0 0
8 51 30 C 250 C 250 0 0
9 51 31 C Open C Open 0 0
10 10 33 C Veteran C Vet 0 0
Calculate Offsets:
Seconds Between Rows:
Update
Save Changes & Close
Cancel

Again let's start simple and get more esoteric as we go. Here you can set up your class structure. *ClassID* must be unique. Just use the next available number and you will be fine. *SeriesClassID* and *SortOrder* address more advanced issues. For now, let's just make them the same as your *ClassID* and I'll explain more shortly. *ClassName* is a longer or more descriptive name for a class (used mostly on report headers and such) and the *ClassAbb* is the class's abbreviation. Try to keep it as short as possible but still unique and descriptive. It will be used in lots of column headers and pull down boxes where space is of the essence. Finally, for hare scramble and GP type events, you will need to specify the default *StartRow* and *Offset* (in seconds) for each class. If you like, just put in the *StartRow* (starting with 1 and going up), and when you are done, enter a number of seconds between rows in the *Calculate Offsets* box and click *[Update]*. This

> Notice that I said "default" start row and offset. You will be able to customize the start sequence on race day from the Signup form if that is what you require.

will automagically calculate the start offset seconds for each class so you don't have to do the math.

OK, now for more fancy stuff. If you don't do co-sanctioning with other circuits, then this might not make sense. Lets say you co-sanction with a neighboring state or circuit on a few races. My bet is that they have a different class structure than you do. I also bet that some or most classes that they have are basically the same as yours. Let me give you an example. Take a look at the screen shot above and note what is going on with the C 200, C 250, and C Open classes. They all have different *ClassIDs* (remember, *ClassID* must be unique), but the same *SeriesClassID*. If you could scroll down to *ClassID* 51, you would find just a plain ole "C" class, no displacement specified. The reason for this is, we only have a "C" class, but circuits that we co-sanction with have C classes split out by displacement. When we go to one of their races, our guys would have to enter a "C" displacement class, but I still want them to get **points** in our circuit's C class! By specifying a different *SeriesClassID*, I am saying that I will allow folks to ride a different but equivalent class, and still get points in the series class that they need them in. One more clarification/example: You might have some of your C riders at that event, and they may all enter different C classes, and all take home a first place trophy, but when you want to count their points, you want them to all be head to head in the series class. *SeriesClassID* solves this problem.

SeriesClassID **must** be the same as the *ClassID* if you want to give season points for that class! Leaving SeriesClassID blank is the same as saying you don't want to give season points for that class.

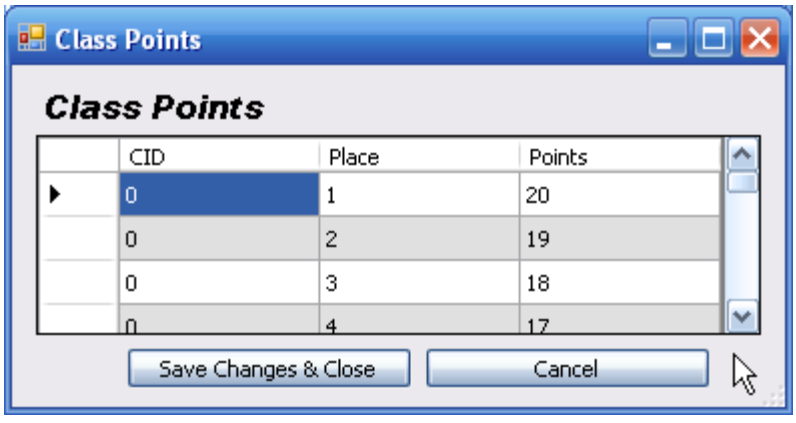
Finally, *SortOrder* is optional. You might wonder why it's needed; after all, you already have a *ClassID* to order things by. The first year you use MotoTally you probably won't need it. But what happens next year when either you or one of the circuits you co-sanction with adds or changes classes. You might want to be able to just add a class, but have it effectively inserted in the middle of the list somewhere in a logical place. You might now say, why not just change the *ClassID* to be in an order that you like. Whatever you do, **don't** do that! MotoTally keeps nice records of what class folks rode each year. When you get to next year and want them to default to the same class they rode last year, you don't want to be changing *ClassID* on an existing class, or else you will have folks defaulting to some very weird classes! All sorts on classes will go first by *SortOrder*, then by *ClassID*.

This is a feature of relational databases, you can change the class name or start row or whatever in one place and have those changes reflected on each rider automatically. At the same time, getting rid of or editing an ID field propagates (potentially bad) changes all over the place.

Note: There are also Course Length and Adv Class columns on this screen. You can safely leave those blank for now. I will describe their purpose at a later time.

Class Points

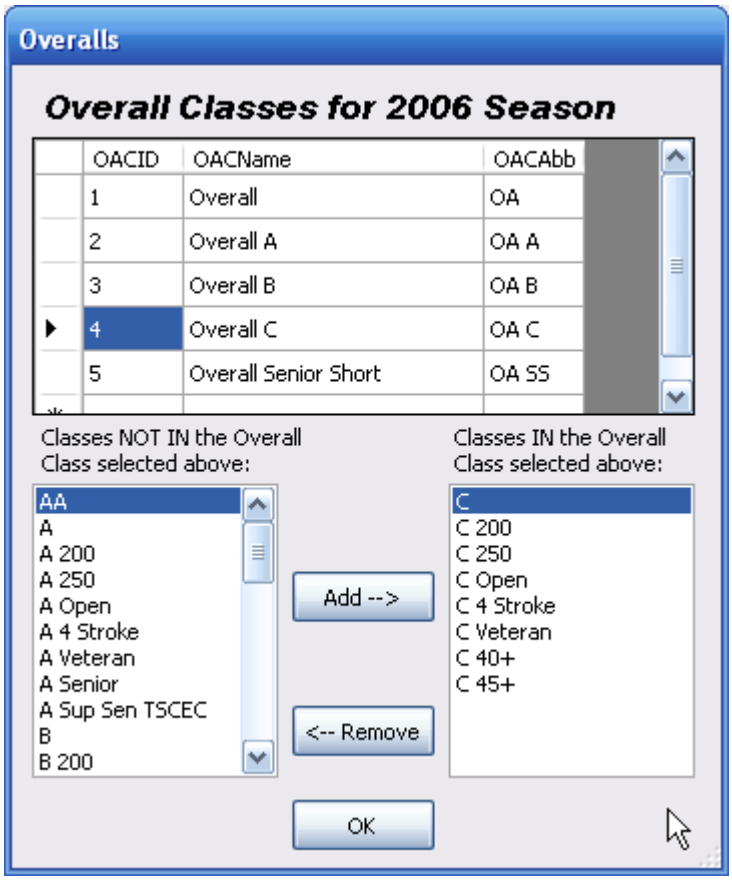
Looking to the menus at the top of MotoTally's main form, select *[Circuit Management]* → *[Classes…]* → *[Points…]* to open up the *Class Points* form. Use this form to edit your point structure. The nitty gritty is this: Enter 0 in for the *ClassID*, then a Place and a corresponding point amount. Now you might be thinking, "Why do I have to put a zero in for the *ClassID*"? Because a zero specifies that this is the default point structure for **all classes**.



I'm going to get fancy on you again… Lets say you have different point structures for different classes, or maybe just different for one class. Specify the default point structure by using zero for the *ClassID*, then add additional point definitions for that one class by putting the *ClassID* of that class in there instead of zero. You could do this for as many different classes as you like.

Overall Classes

Looking to the menus at the top of MotoTally's main form, select *[Circuit Management]* → *[Overalls…]* to open up the Overall Classes form. Use this form to define any overall classes you wish to calculate placements or points for. First you need to define the Overall classes, and then you can specify which classes belong to that overall.

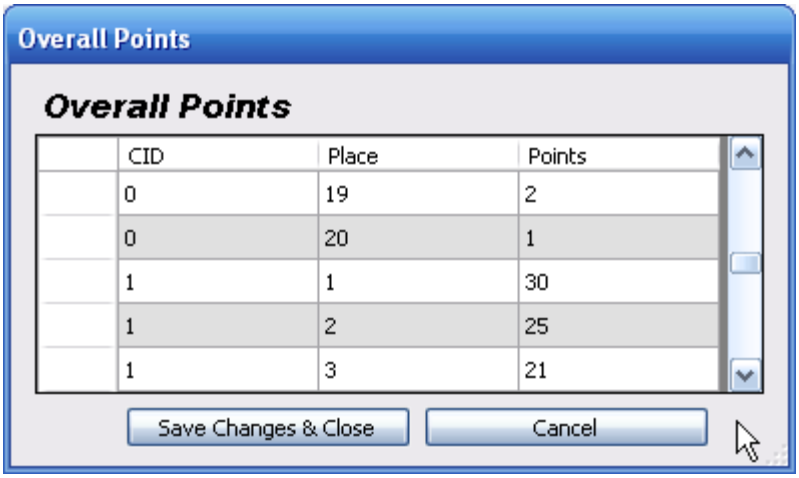


Like all "ID" classes in a lookup table, the OACID (Overall Class ID) is required and must be unique. Start with 1 and go up (all sorting will be done on OACID). OACName and OACAbb are the Overall Class Name and Overall Class Abbreviation, respectively. Similar to other situations, use a longer, more descriptive title for the Overall Class Name, and use a short but still descriptive and unique abbreviation.

On the bottom half of the form are two list boxes. The one on the left initially shows all classes, and the one on the right shows which classes belong to the overall class that is selected above. To add or remove classes from the overall, use the [Add] and [Remove] buttons to add or remove the selected class from the overall. In the screen shot above you can see the classes that I have selected to belong to the Overall C class.

Overall Points

Looking to the menus at the top of MotoTally's main form, select *[Circuit Management]* → *[Overalls…]* → *[Points…]*. This form works exactly like the Class Points form. Referencing the screen shot below, you can see that I have scrolled down to the bottom of CID=0 to the start of CID=1. I have defined the default points structure for all overall classes where CID=0, and for CID=1 (the "Overall" class), I have defined a different points structure which will override the default.



Bike Brands

Looking to the menus at the top of MotoTally's main form, select *[Circuit Management]* → *[Bike Brands]*. This form allows you to edit the bike brands. BBID stands for Bike Brand ID and again, since it is an "ID" field, it must be unique and is required. Similar to other lookup tables, there is a column for the name and abbreviation. Use the Bike Brand column for the full brand name of the bike, and the Bike Abb column as a short, descriptive, but still unique description. If you are setting up the database for the first time, feel free to modify this lookup table to fit your needs as necessary. If you already have data in the database, **don't** go deleting or changing bike brands or abbreviations, as these changes will be propagated across the entire database. For example, if you renamed the KTM record to BMW, everyone in the database that you had listed as riding a KTM would now be listed as riding a BMW. It is safest to just **add** to this list if you already have data in the database.

Summary

You now have the basic setup required to perform event scoring and keep season points!

Rider Signup

Now let's get down to the good stuff, scoring an event. Before you can score the event, you need to sign folks up. On the main MotoTally form, select the year of the race you want to score, and then select the event. Click the *[Signup]* button to bring up the signup form.

First, lets talk about some of the inner workings of how signup works. The first and most important thing you must understand is that a rider and an entry are two different things, stored in two different database tables. A rider must first exist in the database as a rider before they can be "entered" in the event. The data grid view in the upper left hand area of the signup form shows all the riders that exist in your database. The data grid view in the lower left hand area of the signup form shows all the riders that are entered in the event (Entries).

Another important concept is "Yearly Rider Info". On the right hand side of the form, the rider's info is displayed up top, and below that, their yearly rider info is displayed. All of the data in the "Rider Info" group box is data that is not time dependant. Of course, a rider could move or change their phone number, but most likely, all we care about is their most up-to-date info. Therefore, a "history" is not needed. On the other hand, what class they ride or their bike number or what type of bike they ride will likely change from year to year, and we might want to keep that historic information for future reference. Notice in the upper right hand corner of the "Yearly Rider Info" group box is a year. Since we can only display one year of data at a time on this form, and we are most likely interested in current data on race day, we always display the latest yearly info we have on the rider, and this year that is displayed lets us know which year this data came from.

Most of the fields here are self explanatory, but let's talk about a few of the less obvious. A few of these fields are useful if your series or circuit takes membership dues in order to receive series points, or if you assign a membership/series/circuit number to each rider. Referencing the screen shot above, you will note fields labeled "HBGP#", "SNum1", and "SNum2". These are dynamically labeled fields. The HBGP# will actually be whatever the abbreviation is for your circuit, and it is intended to be the series or circuit number for that rider. The SNum1 and SNum2 fields are there in the event that you co-sanction races with other circuits/series and need to keep a number for another circuit. This can come in handy for reporting race results to the other circuit. Finally, the Member checkbox allows you to specify whether the rider is a paid member of your circuit. Use this to specify whether that rider should receive series points or not.

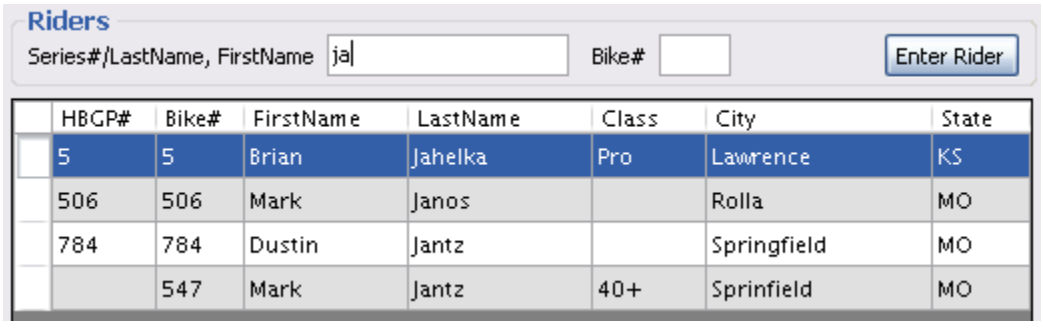
> Note that you can change the names SNum1 and SNum2 to something more meaningful. On the main MotoTally form, go to *[Settings]* → *[Application]*.

Rider Search

Now that you've got the need-to-know background fully understood, lets go through the signup form in more detail. First lets check out the Riders group box. Use this box to filter or search for a rider. In the first box, you can enter in the rider's series number to find the rider in the database with that number. Alternatively, you could type in the riders last name first, then follow it with a space or a comma, and enter their first name in. If you want to search by the bike number, then use the second box and enter a bike number to search for.

As you type in your search, the rider list below will filter out all riders not matching the criteria you specified. This is helpful in that you will know when you can stop typing as soon as you see your match. For example, you may be able to find the rider "John Quinton" simply by putting a "q" in the first box. On the other hand, a search for a more common name like "John Smith" may require you to type nearly their entire name in the box (if you have lots of riders in your database, and remember, last name first). In the event that no rider was found matching your criteria, the rider data grid view will be blank and you will receive a "None Found." message like the one in the screen shot here.

There are lots of other little things going on at this point that are not evident by looking, so let me get into some more detail. Here I have typed in "ja" into the search box and MotoTally has narrowed my list to 4 riders whose last name starts with "ja". I have a few options here for selecting the rider I want to enter. First off, clicking the *[Enter Rider]* button will enter the selected rider (the one with the blue highlight) in the event. Also, if I hit the enter key on my keyboard right now, the selected rider would be entered in the event.



If I was trying to enter Mark Janos in the event, then I have a few options. I could use the down arrow to move the selection to highlight his row, then hit enter. I could also add a "no" to the search (for a total of "jano") so

that Mark was the only one displayed, then hit enter. I could also use the mouse to select him and then click *[Enter Rider].* If I were trying to enter Dustin Jantz in the event, I have a few different options as well. I could use the down arrow key to select him, I could use the mouse to select him, or I could keep typing in the search box till I had "jantz m" entered in there. Since there are two Jantzs in the database, I need to start specifying first name in my search as well to narrow it all the way down. Performing a search by Bike# works exactly like the same.

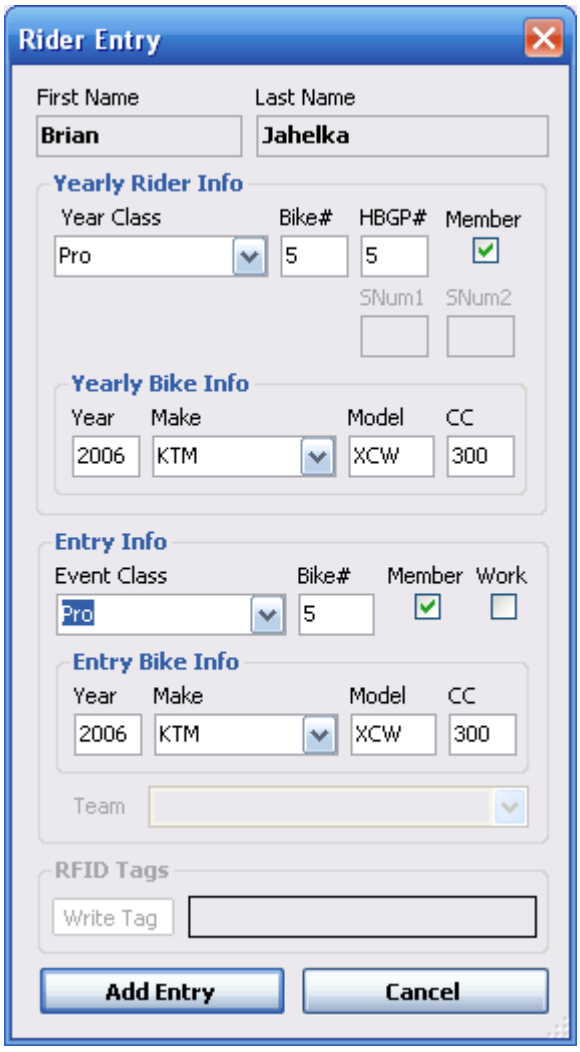
Add New Rider

> If a duplicate rider does get entered in the database, you can fix it by going to *[Rider Management]* → *[Fix Duplicate Riders]* on MotoTally's main form.

Remember that the rider must first exist in the database as a rider before you can enter them in the event. If your rider does not exist in the database, then you first need to add them. I recommend a thoroughly exhaustive search for that rider before adding a new one! If you didn't find them by bike number, search for their name or vice versa. A rider's number could be wrong in the database, and in some cases, their name may be spelled wrong (if you don't know already, you will realize that poor handwriting on entry forms is common). Adding a duplicate rider to the database is a very bad thing, especially if you are trying to keep track of points. You would end up with two riders with the (potentially) same name in your standings, and neither of their point totals would be correct.

Adding a new rider is a simple process. Either tab over to the *[Add New Rider]* button or hit enter or click it. This will enable the Rider Info and Yearly Rider Info group boxes, allowing you to enter in the new rider's information. At a minimum, you want to supply a first name, last name, and the class they will be riding. Use tab and shift-tab to move to the next or previous field. Use the enter key or click on the [Add] button to add this rider to your database.

After you have added the new rider, MotoTally will ask you if you want to enter this rider in the event. Most likely you do, so you will want to click [Yes] (or just hit enter as it is the default).

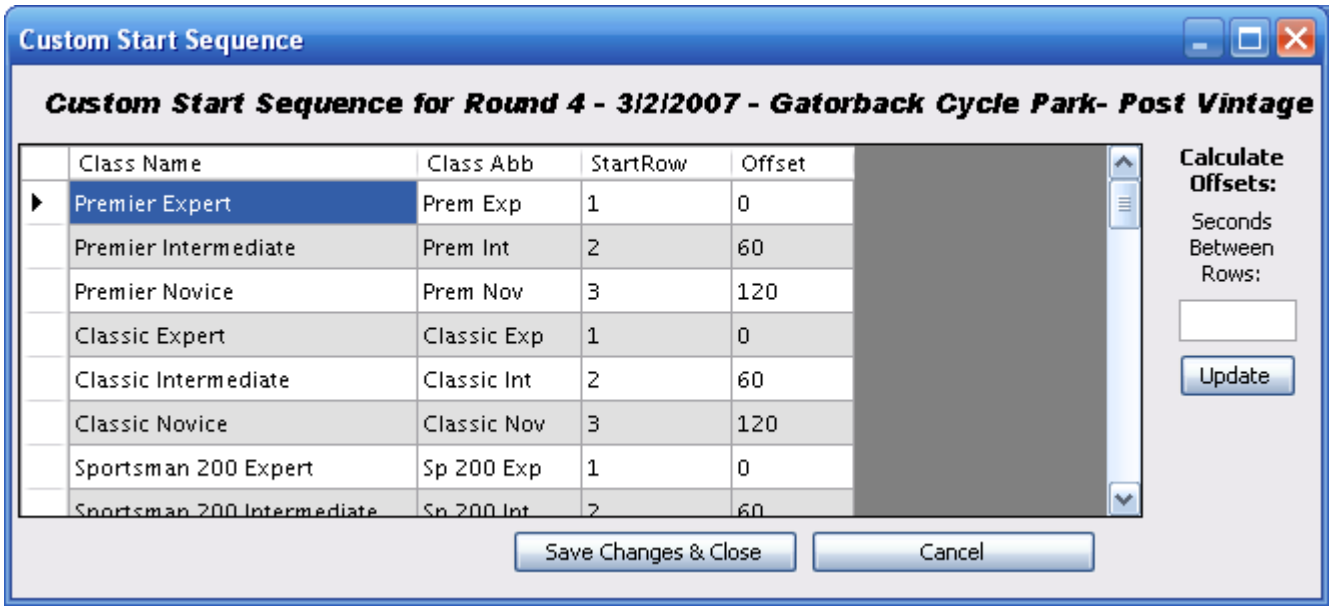


Entering a Rider

Once you have found your rider in the rider database and clicked the *[Enter Rider]* button (or hit enter in one of the filter boxes), the Rider Entry form comes up. Here you will find the Yearly Rider Info and Entry Info group boxes. By default, everything that is in the Yearly Rider Info is placed in the Entry Info. This illustrates the importance of putting as much data as possible in the Yearly Rider Info, because it will save you time when entering a rider in an event. If all of your Yearly Rider Info data is correct, and nothing is changing on this particular race day, then all you have to do is hit enter (or tab to or click the *[Add Entry]* button) and the rider is entered in the event.

Custom Start Sequence (Hare Scrambles/GPs)

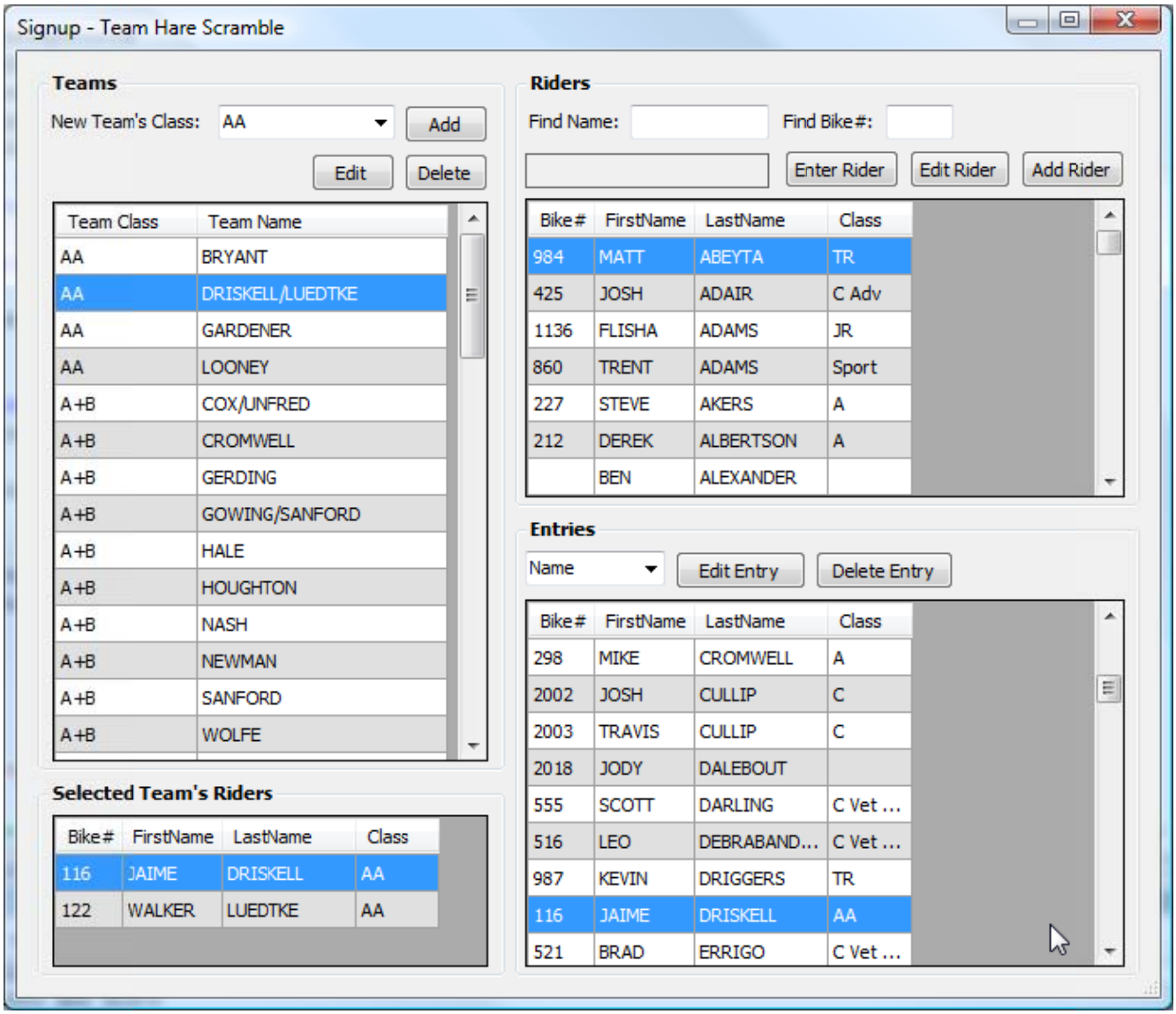
MotoTally allows you to change the starting order (Hare Scramble and GP style events only) for the classes on a per event basis. When you set up your classes, you specified a default starting row and offset time. Now that we are dealing with a specific event, we can change this if needed just for this event. Click the *[Custom Start Sequence…]* button located in the lower left hand corner of the signup form.



This form initially shows you the default start row and offset that you specified when you defined your classes for the year. If you need to change the start row for any classes, just change it to what it needs to be for this race. When you are done setting the start rows, you may enter a number of seconds between rows in the Calculate Offsets box and click the [Update] button to recalculate the offsets to match up with the new starting row. Alternatively, you can specify the offset manually in the data grid. Just realize that changing the start row alone is not enough, you must also change the offset.

Team Hare Scramble Signup

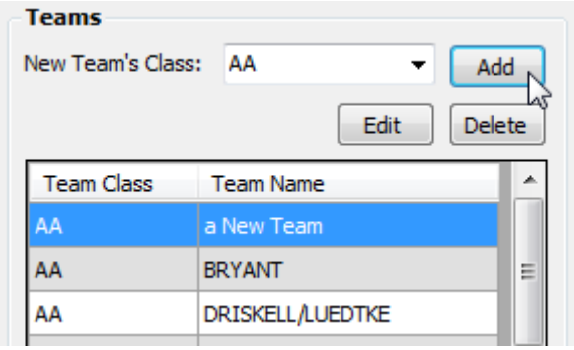
Team Hare Scrambles have a special signup screen that is different from all other event types. MotoTally allows you to make teams and then add riders to it. This has a huge advantage in that instead of having to reprogram everyone's transponder just for a team race, you can use the rider's regular yearly number and leave their transponder programmed as is.


Signup - Team Hare Scramble
Teams
New Team's Class: AA
Add
Edit
Delete
Team Class | Team Name
AA | BRYANT
AA | DRISKELL/LUEDTKE
AA | GARDENER
AA | LOONEY
A+B | COX/UNFRED
A+B | CROMWELL
A+B | GERDING
A+B | GOWING/SANFORD
A+B | HALE
A+B | HOUGHTON
A+B | NASH
A+B | NEWMAN
A+B | SANFORD
A+B | WOLFE
Selected Team's Riders
Bike# | FirstName | LastName | Class
116 | JAIME | DRISKELL | AA
122 | WALKER | LUEDTKE | AA
Riders
Find Name:
Find Bike#:
Enter Rider
Edit Rider
Add Rider
Bike# | FirstName | LastName | Class
984 | MATT | ABEYTA | TR
425 | JOSH | ADAIR | C Adv
1136 | FLISHA | ADAMS | JR
860 | TRENT | ADAMS | Sport
227 | STEVE | AKERS | A
212 | DEREK | ALBERTSON | A
BEN | ALEXANDER
Entries
Name
Edit Entry
Delete Entry
Bike# | FirstName | LastName | Class
298 | MIKE | CROMWELL | A
2002 | JOSH | CULLIP | C
2003 | TRAVIS | CULLIP | C
2018 | JODY | DALEBOUT
555 | SCOTT | DARLING | C Vet ...
516 | LEO | DEBRABAND... | C Vet ...
987 | KEVIN | DRIGGERS | TR
116 | JAIME | DRISKELL | AA
521 | BRAD | ERRIGO | C Vet ...

Let's take a look at the Team Hare Scramble signup form. Note that there are four separate areas on the form. On the left we have Teams and Team Riders. By selecting a team, the selected team's riders will update in the group box below. This allows you to see a little more detail about the riders entered on the team. On the right, we have Riders and Entries. This setup is very similar to a regular signup screen for all the other event types. Under Riders, you have riders that already exist in the database. In the Entries list, you have all the riders that are entered in the event.

Adding a new Team

In order to enter riders into the event, you must first create a team for the riders. After you have created the team, you can then add riders to the team. Select the class of the new team, and then click the *[Add]* button. A new team will show up in the team list called "a New Team". With this team selected, you can now put riders on this team.



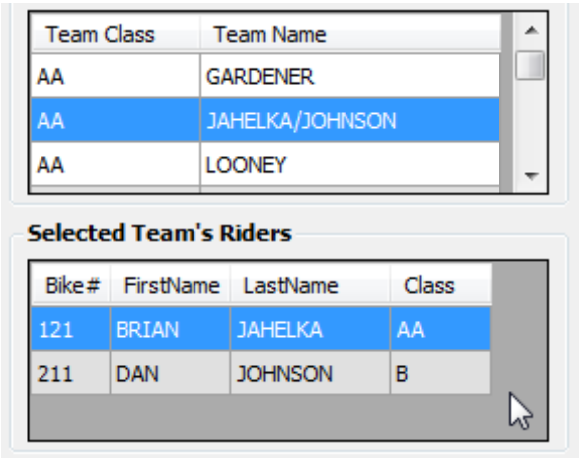
Adding Riders to the Team

Now that you have the new team added and selected, you can add riders to the team by entering riders in the event just like you normally do. Here I typed in the first four letters of my last name to narrow the list, then I can either hit enter or click the *[Enter Rider]* button to add myself to the team. After I have added the first rider to the team, I can add another team member the same way. Note that the team name will automatically update to contain the last names of both team members.

Most of the other buttons on this form are fairly self explanatory or have been described in other sections, but I'll go ahead and explain some of them in a little detail.

Editing a Team

You can edit a team's class or name by selecting the team then clicking the *[Edit]* button. This will bring up a form that allows you to select a different class or change the team name. Note that if you add or remove a rider from the team, your changes to the team name will be overwritten with the default team name.



Deleting a Team

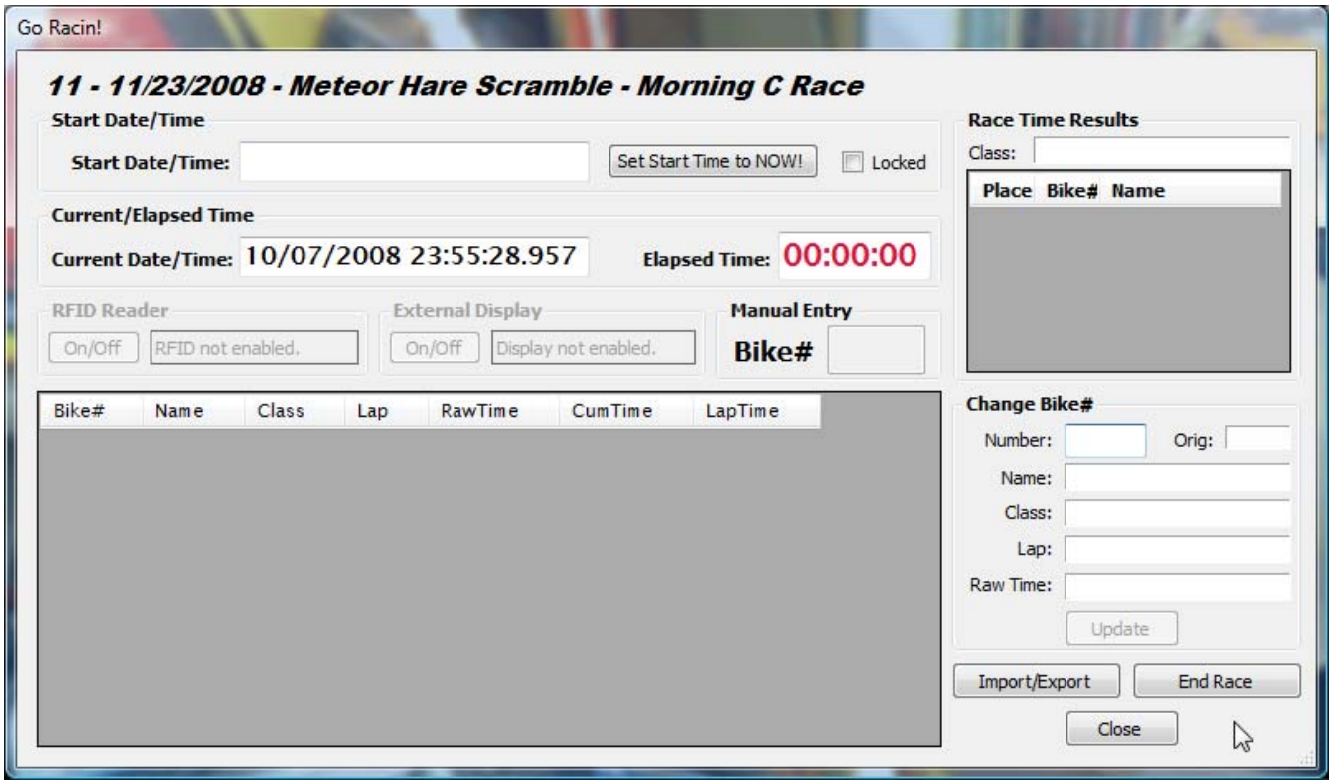
You can delete a team AND its riders from the event by clicking the *[Delete]* button.

Removing a Rider from a Team

If you need to remove a rider from a team, just select that rider (either in the 'Selected Team's Riders' list OR in the 'Entries' list), then click the [Delete Entry] button. The rider will be removed from the event and the team, and the team name will update to reflect the deletion. If the rider you deleted was the last one on the team, the team name will change to 'Unknown'. You shouldn't have a team in there with no one entered on it, so you can simply delete the team to get rid of it.

Scoring a Hare Scramble Event

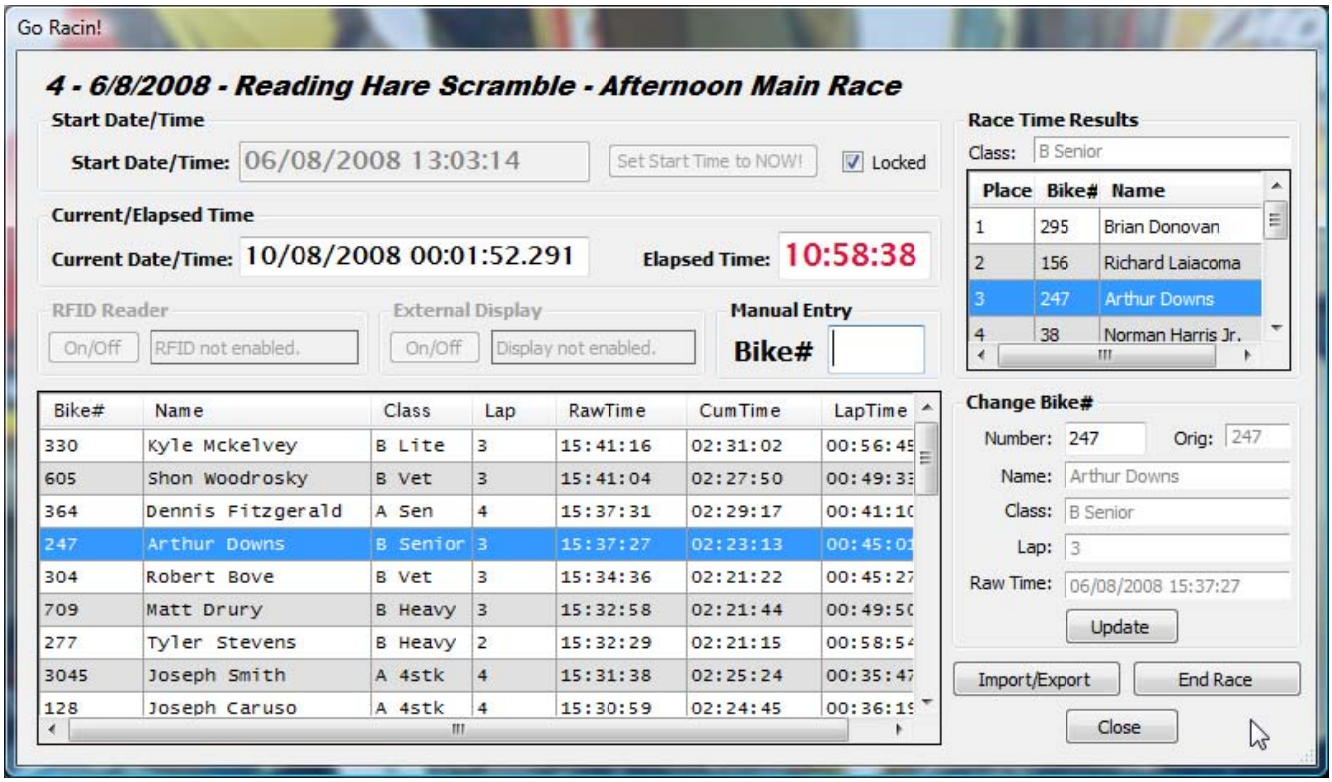
Now that you have everyone entered in the event and you are ready to start the race, let's do it! On the main MotoTally form, make sure the correct Year, Event, and Moto are selected on the main form. Click the *[Race]* button to bring up the race form.



When you first open the race form, this is what it will look like. We have the date/time that the event started, which is now blank because the race hasn't started yet. The *[Set Start Time to NOW!]* button will put the current date/time in the start date/time box. Use this button when the first row starts. If the start is near enough to the scoring gate, then you can go off the sound of the bikes, otherwise, a start official radioing back to the scoring personnel will work as well. You could also have a start official write down a start time (as long as their watch is synced with the computer clock), and the scoring personnel could enter this in later, as long as it's before the first rider comes through the gate. Of course, this is much more tedious as you will have to enter a full date and time that is formatted properly (mm/dd/yyyy hh:mm:ss). Once you click the *[Set Start Time to NOW!]* button, the Locked checkbox becomes checked. This will help prevent one from accidentally changing the start date/time. If you hit the button too soon, don't worry! Just uncheck the Locked checkbox, and click the *[Set Start Time to NOW!]* button again and the new time will be used. Once there is a valid start time entered, the elapsed time will start counting up in real time. You can go off this time to know when you need to stop the race, or at least, stop folks from going out for another loop!

The RFID Reader and External Display boxes allow you to manually turn those items on or off. In reality, you don't need to even touch these buttons. The RFID Reader and External Display are NOT enabled unless you have set them up previously. Otherwise, they will go on automatically after the race has started. This will keep folks from accidentally being read if they are wandering around with their RFID tag on them or ride somewhere near the scoring gate to get to the start line. You may turn the RFID reader OFF when the race is done if you aren't going to close the race form right away. Also, if the RFID reader gets hung up and quits reading for some reason, turning the reader off and then back on will reset it.

If you are entering bike numbers manually (or by using a bar code scanner), then you will need to enter them in the Bike# box and press the enter key as the rider passes the scoring gate. If you miss some one, it might be a good idea to make a note of the bike number and approximate time on a piece of paper so you can go back and add them in later (always check the backup sheet).



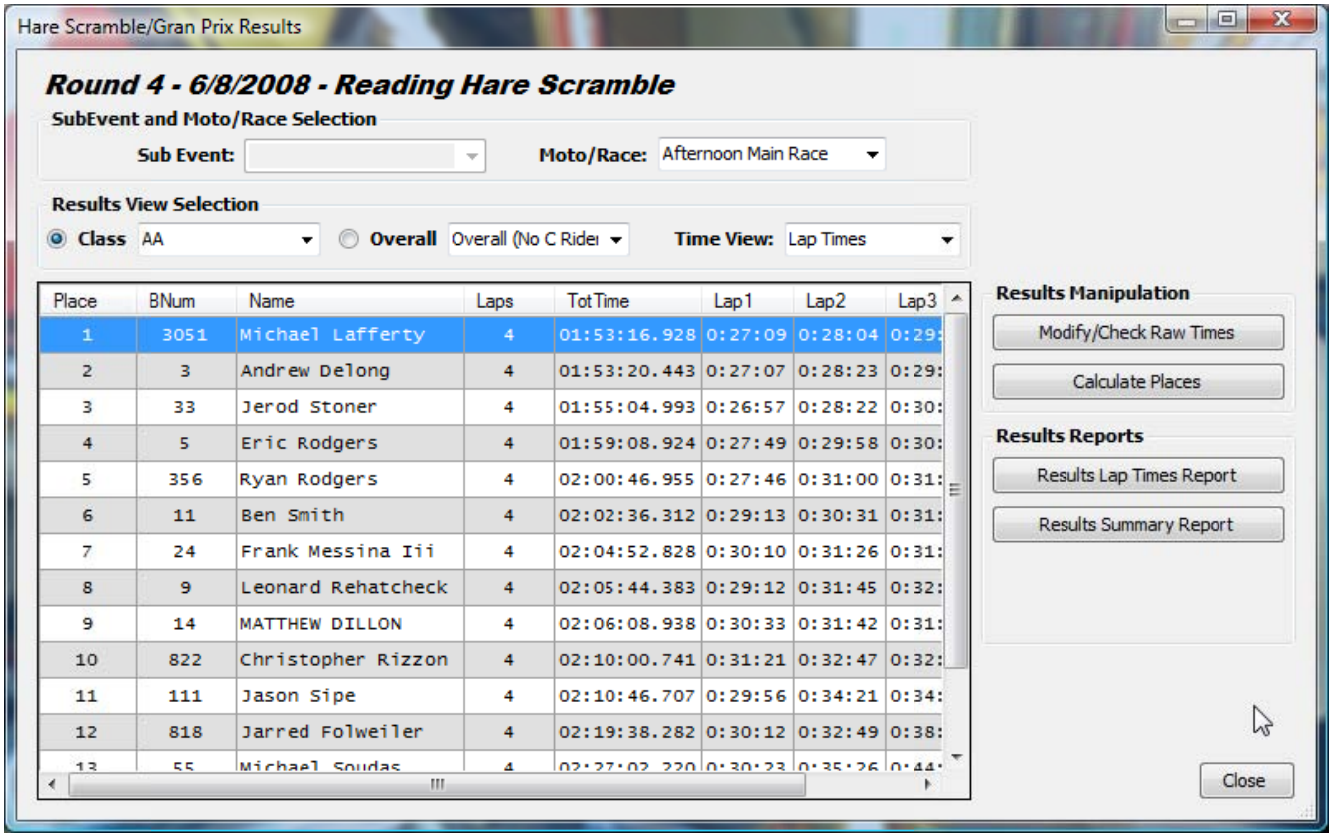
As the riders are entered into the computer (either manually, or by RFID, or by bar code), several things happen. The data grid in the lower left corner will have a new row added for each lap time recorded, with the latest time at the top of the list and highlighted. At the same time, the Real Time Results data grid in the upper right corner will be updated with the current placements for the class of the last rider entered. And last but not least, the rider's info will be displayed in the Change Bike# group box. By using the mouse to select a rider's lap time in the lower left hand data grid, everything on the right hand side of the form updates to correspond with that lap time/rider/class. Generally, while a race is going on, it is unlikely that you will have time to change anything, but in the event that you keyed in the wrong bike number, and you have time to fix it before the next rider comes through, then you can select that lap time where you put in the wrong bike number, type in the new number in the Number box, and click the *[Update]* button to fix it. Tip: If a number was accidentally entered in, there is no way to delete it from this screen (for safety reasons). If you would like to mark that accidental read/mistype, change that bike number to 9999 or something like that and you can fix it later.

When the race is over, you don't need to do anything special! If you would like to, you can click the *[End Race]* button to disable the form. You can do this to help keep someone from accidentally putting in another time after the race is over. If the *[End Race]* button has been clicked and the race is now "closed", the button will read *[Re-Open Race]*. Click it and it will enable everything on the form again. In the unlikely event of some catastrophic problem, like loss of power, or for any reason if the race form gets closed, all you have to do is open the race form back up and keep going. The start time is stored and you don't have to do anything, just keep going like normal. Obviously, if you missed anyone during the down time, you will have to add them in

LATER. You can easily do this later using a different form. You don't want to try to play catch up on the main race form.

Hare Scramble Results

After your race is completed and you have closed the race form, you will be returned to the main form. Clicking on the *[Results]* button will bring up the form that allows you to view, edit, and print the results.

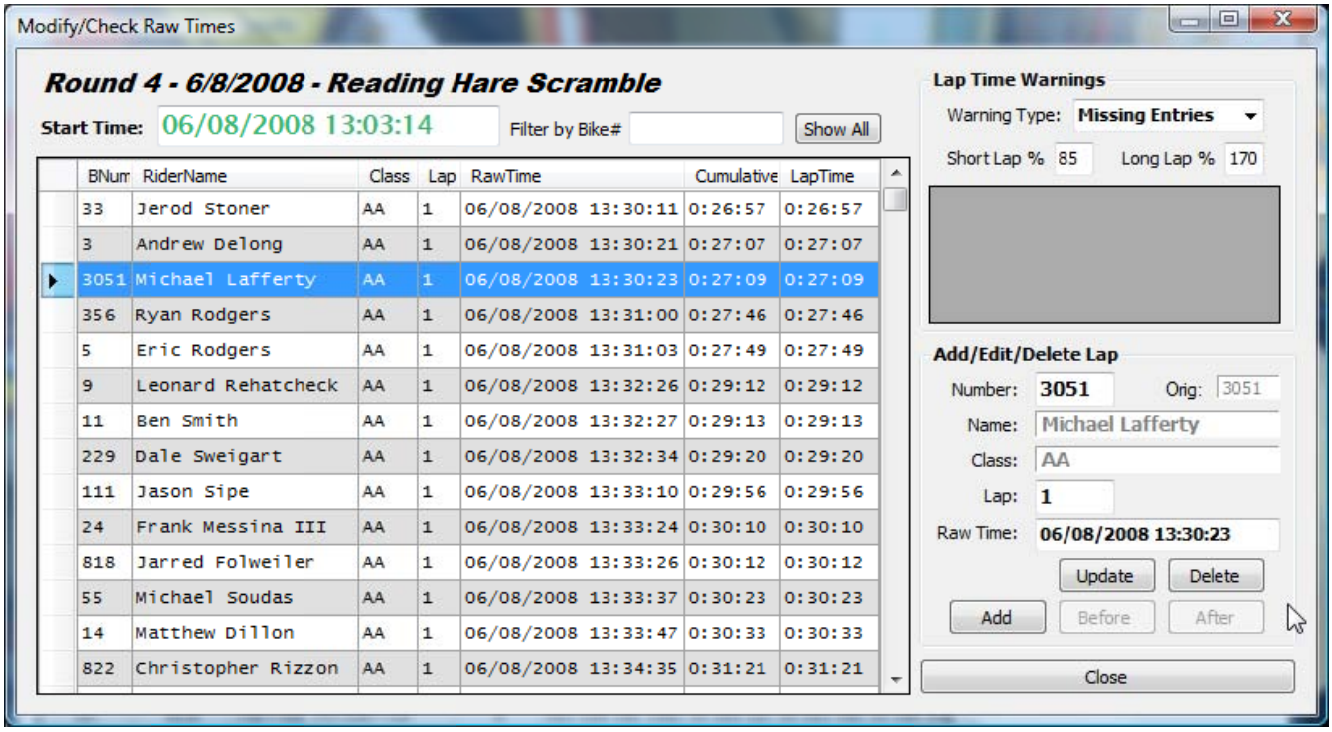

Hare Scramble/Gran Prix Results
Round 4 - 6/8/2008 - Reading Hare Scramble
SubEvent and Moto/Race Selection
Sub Event:
Moto/Race: Afternoon Main Race
Results View Selection
Class AA
Overall Overall (No C Rider
Time View: Lap Times
Place BNum Name Laps TotTime Lap1 Lap2 Lap3
1 3051 Michael Lafferty 4 01:53:16.928 0:27:09 0:28:04 0:29:
2 3 Andrew Delong 4 01:53:20.443 0:27:07 0:28:23 0:29:
3 33 Jerod Stoner 4 01:55:04.993 0:26:57 0:28:22 0:30:
4 5 Eric Rodgers 4 01:59:08.924 0:27:49 0:29:58 0:30:
5 356 Ryan Rodgers 4 02:00:46.955 0:27:46 0:31:00 0:31:
6 11 Ben Smith 4 02:02:36.312 0:29:13 0:30:31 0:31:
7 24 Frank Messina Iii 4 02:04:52.828 0:30:10 0:31:26 0:31:
8 9 Leonard Rehatcheck 4 02:05:44.383 0:29:12 0:31:45 0:32:
9 14 MATTHEW DILLON 4 02:06:08.938 0:30:33 0:31:42 0:31:
10 822 Christopher Rizzon 4 02:10:00.741 0:31:21 0:32:47 0:32:
11 111 Jason Sipe 4 02:10:46.707 0:29:56 0:34:21 0:34:
12 818 Jarred Folweiler 4 02:19:38.282 0:30:12 0:32:49 0:38:
Results Manipulation
Modify/Check Raw Times
Calculate Places
Results Reports
Results Lap Times Report
Results Summary Report
Close

From the Results form, you can view the results for any moto, class or overall (just make the appropriate selections from the provided pull down boxes). You can also view Lap Times, Cumulative Times, and Raw Times by selecting one from the Times pull down box. Lap Times and Cumulative times are both corrected for the class start row offset. The Raw Time is the actual time of day that they completed the lap, and is NOT corrected for start row offset.

In the Results Manipulation group box are two buttons. The first *[Modify/Check Raw Times]* allows you to modify the lap times after the race is over, and check for possible data entry errors. You should *always* go here after the race is over and make sure nothing looks strange. The *[Calculate Places]* button calculates (or recalculates) the class and overall placements. You will need to click this button after you have made any changes and before you print out your results.

Results Reconciliation (Modify/Check Raw Times)

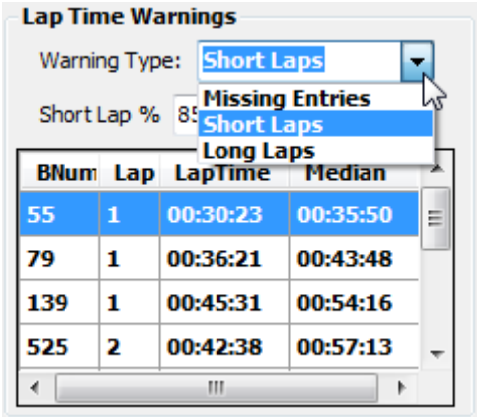
After the race is over, it is highly likely that at least one read was missed by the RFID reader, or a bike number was typed in wrong, or something! You should always check your results using the Modify/Check Raw Times form to make sure everything looks good. To reconcile the results, click the [Modify/Check Raw Times] button.


Modify/Check Raw Times
Round 4 - 6/8/2008 - Reading Hare Scramble
Start Time: 06/08/2008 13:03:14
Filter by Bike#
Show All
BNum RiderName Class Lap RawTime Cumulative LapTime
33 Jerod Stoner AA 1 06/08/2008 13:30:11 0:26:57 0:26:57
3 Andrew Delong AA 1 06/08/2008 13:30:21 0:27:07 0:27:07
3051 Michael Lafferty AA 1 06/08/2008 13:30:23 0:27:09 0:27:09
356 Ryan Rodgers AA 1 06/08/2008 13:31:00 0:27:46 0:27:46
5 Eric Rodgers AA 1 06/08/2008 13:31:03 0:27:49 0:27:49
9 Leonard Rehatcheck AA 1 06/08/2008 13:32:26 0:29:12 0:29:12
11 Ben Smith AA 1 06/08/2008 13:32:27 0:29:13 0:29:13
229 Dale Sweigart AA 1 06/08/2008 13:32:34 0:29:20 0:29:20
111 Jason Sipe AA 1 06/08/2008 13:33:10 0:29:56 0:29:56
24 Frank Messina III AA 1 06/08/2008 13:33:24 0:30:10 0:30:10
818 Jarred Folweiler AA 1 06/08/2008 13:33:26 0:30:12 0:30:12
55 Michael Soudas AA 1 06/08/2008 13:33:37 0:30:23 0:30:23
14 Matthew Dillon AA 1 06/08/2008 13:33:47 0:30:33 0:30:33
822 Christopher Rizzon AA 1 06/08/2008 13:34:35 0:31:21 0:31:21
Lap Time Warnings
Warning Type: Missing Entries
Short Lap % 85
Long Lap % 170
Add/Edit/Delete Lap
Number: 3051
Orig: 3051
Name: Michael Lafferty
Class: AA
Lap: 1
Raw Time: 06/08/2008 13:30:23
Update
Delete
Add
Before
After
Close

In the data grid on the left, we have a listing of all the laps recorded, in order. These should be in the exact same order as your backup sheet. On the top right we have a warnings list. And on the bottom right we have a section that allows you to add, edit, or delete a lap.

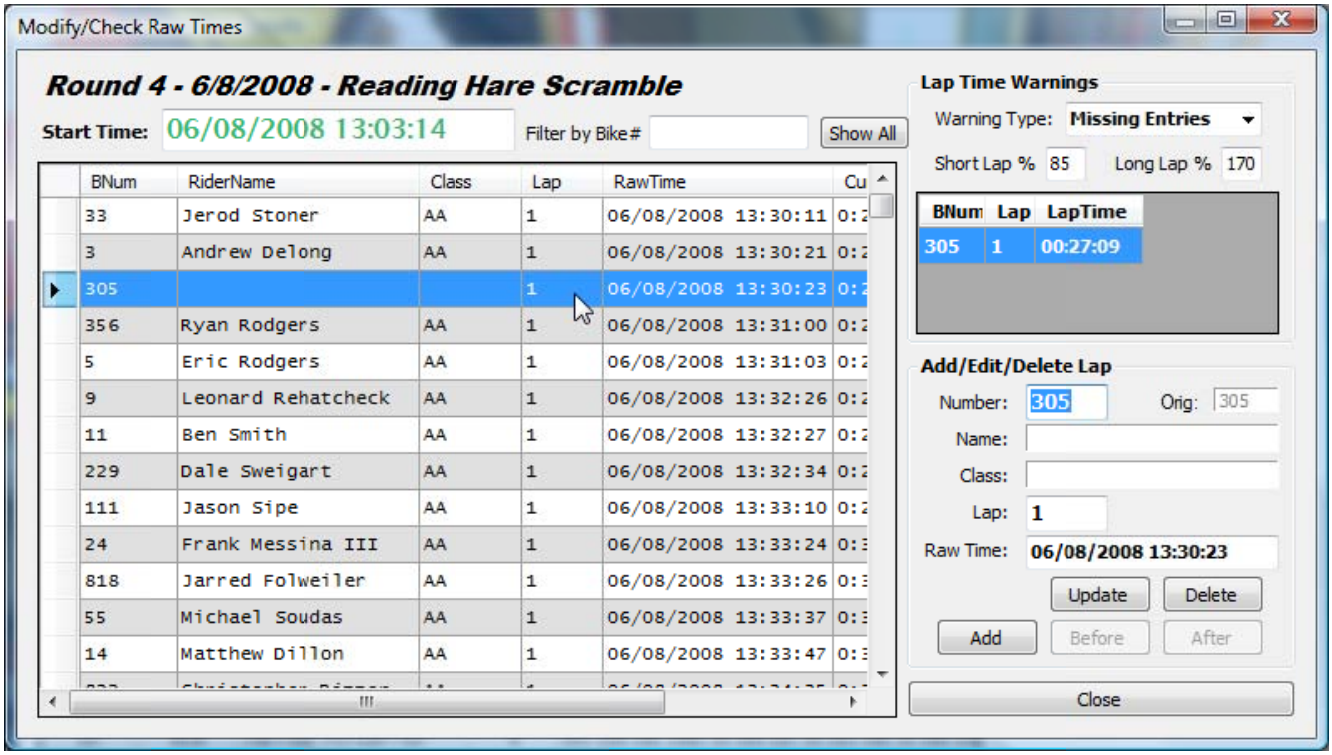
Looking at the recorded laps grid on the left, note a few things. Each record will tell you the bike number, name, and class of the rider. The lap tells you how many times the rider came through the scoring gate at this point. Raw time is the time of day that the lap was recorded. Cumulative time is the elapsed time for the race that the rider came through with the adjustment for their start row. This is the actual amount of time they had been out on the course since their row started. Lap time is simply the amount of time it took them to complete that lap.

Lap Time Warnings

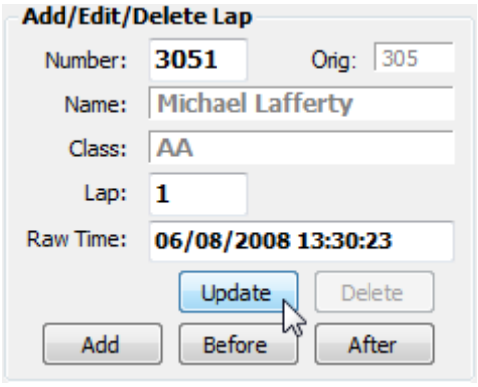


Looking at the Lap Time Warnings list, you will see that there are three options in the Warning Type pull down box, Missing Entries, Short Laps, and Long Laps. Selecting the Missing Entries option will show you all bike numbers that were recorded that don't have a matching entry. A warning will show up in this list if there isn't a rider entered with that bike number, or if you have mistyped a number in the scoring gate. The other two options let you know a rider has any especially long or short laps. The median lap time for each rider is calculated, and if one (or more) of their laps falls outside the specified percentage of the rider's median lap, then this will be reported here. Most of the time you can use this to make sure you didn't accidentally enter someone twice (they would have a very short lap time) or miss one of their laps (their lap time was roughly double what their median time was). One final tip before we move on to resolving these errors, if you click on one of the rows that shows up in this warnings list, that lap will be found and selected in the lap times grid automatically to help you find it easier.

Fixing any errors or missing lap time records is a fairly straight forward operation. We will discuss this in a little more detail now.


Modify/Check Raw Times
Round 4 - 6/8/2008 - Reading Hare Scramble
Start Time: 06/08/2008 13:03:14
Filter by Bike#
Show All
BNum RiderName Class Lap RawTime
33 Jerod Stoner AA 1 06/08/2008 13:30:11
3 Andrew Delong AA 1 06/08/2008 13:30:21
305 1 06/08/2008 13:30:23
356 Ryan Rodgers AA 1 06/08/2008 13:31:00
5 Eric Rodgers AA 1 06/08/2008 13:31:03
9 Leonard Rehatcheck AA 1 06/08/2008 13:32:26
11 Ben Smith AA 1 06/08/2008 13:32:27
229 Dale Sweigart AA 1 06/08/2008 13:32:34
111 Jason Sipe AA 1 06/08/2008 13:33:10
24 Frank Messina III AA 1 06/08/2008 13:33:24
818 Jarred Folweiler AA 1 06/08/2008 13:33:26
55 Michael Soudas AA 1 06/08/2008 13:33:37
14 Matthew Dillon AA 1 06/08/2008 13:33:47
Lap Time Warnings
Warning Type: Missing Entries
Short Lap % 85
Long Lap % 170
BNum Lap LapTime
305 1 00:27:09
Add/Edit/Delete Lap
Number: 305
Orig: 305
Name:
Class:
Lap: 1
Raw Time: 06/08/2008 13:30:23
Update
Delete
Add
Before
After
Close

Editing Lap Times



First, let's deal with a mistyped bike number in the scoring lane. In the screen shot above I have selected Missing Entries in the Warning Type drop down box. MotoTally lets me know that there is no entry for bike number 305. I clicked on that warning, and MotoTally found that lap in the lap times grid. I clicked on the lap time, and now that lap information has updated in the Add/Edit/Delete Lap group box. By checking my backup sheet, I can see that bike number 305 should have been 3051, so I type the correct bike number in the Number box. Now instead of MotoTally not knowing who 305 is and displaying no name or class, it will update to show who it has down for bike number 3051. This confirms to me that I have put the right number in, and now I can simply click the *[Update]* button to give that lap record a new number. In the event that the 305 entry was a bad entry, and shouldn't have been there, I could have deleted this lap record simply by clicking the *[Delete]* button.

Adding Missed Laps

Adding in a missed lap is fairly straight forward as well. MotoTally provides three ways to add in a missed lap. You can add in a new lap by typing in a bike number and a time and clicking the [Add] button. Even better, you can find your missing lap on your backup sheet and add in the missed lap one second before or after an existing lap. Let's walk through this operation. You can reference the above screen shots to help you out in this example. Let's say your lap time grid shows the first four riders coming through as 33, 3, 356, and 5. But our backup sheet shows that bike number 3051 should have come in after 3 and before 356. Select the lap record for bike number 3. His information will show up in the Add/Edit/Delete Lap group box. Now, change

the bike number to 3051, and click the *[After]* button. A new lap will be added in for rider number 3051 that is one second after the recorded time for rider number 3. The one second after probably isn't the exact time that the rider came through, but it won't really make much difference for laps in the middle of the race.
One final note before a re-cap, note the Filter by Bike # box at the top of the form. You can use this to filter the list of lap records to certain bike numbers. If you wanted to see just the laps by bike number 3051, then type 3051 in this box and the lap records grid will automatically update to show only laps with that bike number. If you want to see the lap records by more than one rider, simply put additional bike numbers in that box separated by spaces. This can be VERY useful when tracking down a missed lap. If you know that bike number 3051 is missing a lap and came in right after bike number 3, then put both of those bike numbers in the filter box and it will be very easy to find the spot where you need to add in that missed lap.

Results Reconciliation Re-Cap

Updating a Lap Record

1) Select the lap record you want to update in the lap records grid.
2) Type in a new Number or Raw Time.
3) Click the *[Update]* button.

Deleting a Lap Record

1) Select the lap record you want to delete in the lap records grid.
2) Click the *[Delete]* button.

Add a new Lap Record (Before or After an existing record)

1) Select the lap record that is directly before or after the missing record.
2) Type in the bike Number for the new record.
3) Click the *[Before]* or *[After]* button to add in the missing record one second before or after the lap record you originally selected.

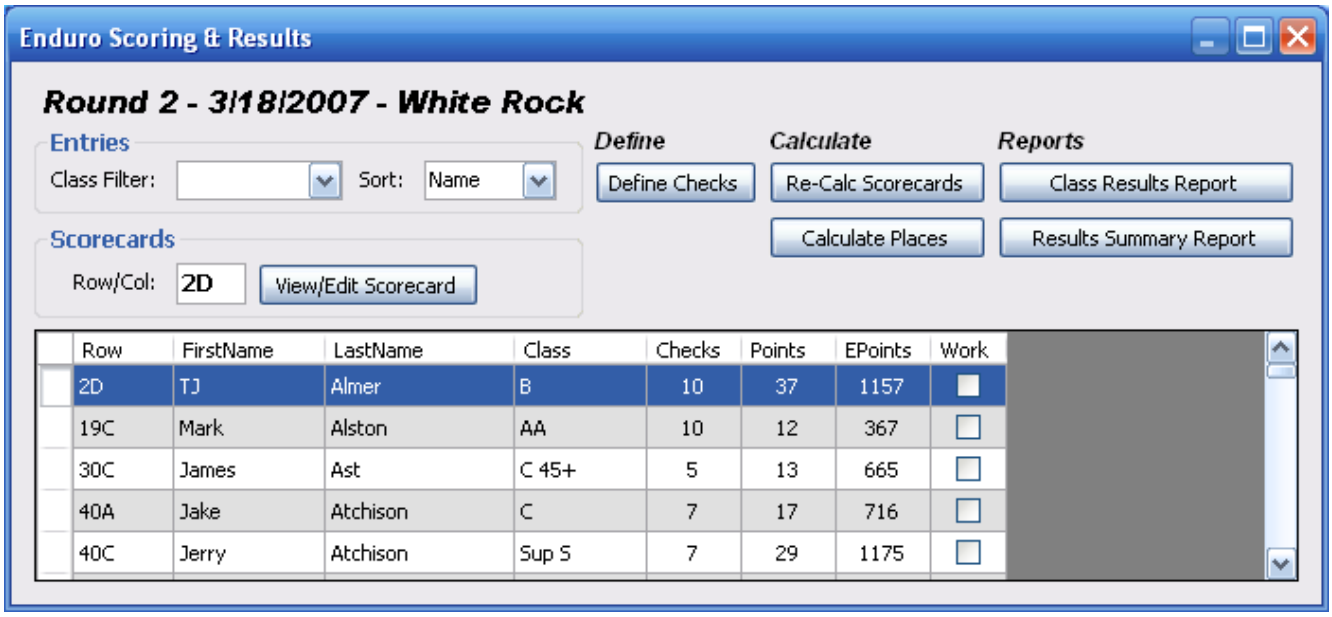
Add a new Lap Record (user specified time)

1) Select the lap record that is near the missing record.
2) Type in the Number of the new record.
3) Modify the Raw Time to match the time you want to use for the new lap record.
4) Click the *[Add]* button to add in a new lap record with the bike number and time you specified.

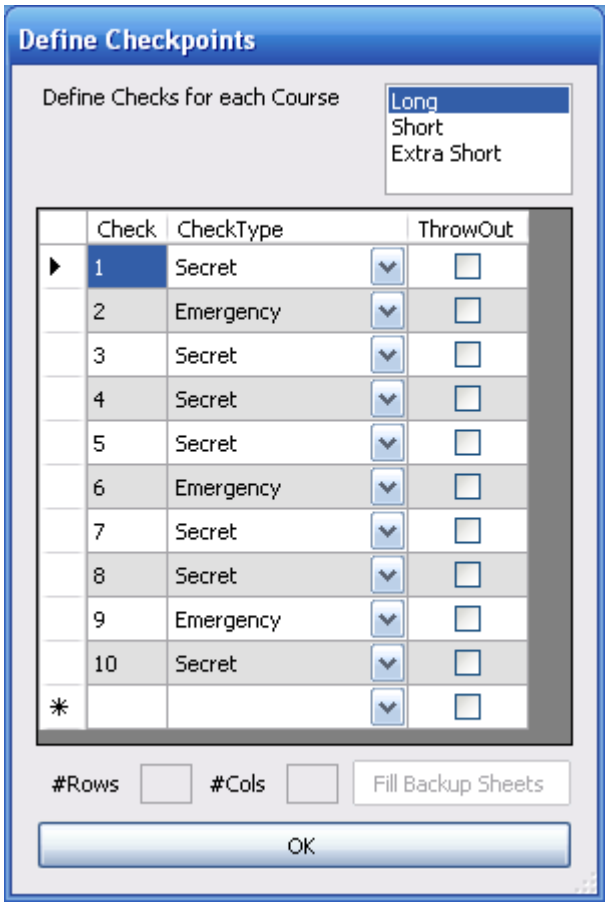
Finally, ***don't forget*** that after any changes made in the Modify/Check Raw Times form, you MUST click the [Calculate Places] button on the Results form in order to update the class placements before you print results!

Scoring an Enduro Event

Now that you have everyone entered in the event and you are ready to start the race, let's do it! On the main MotoTally form, make sure the correct year and event are selected on the main form. Click the *[Race]* button to bring up the race form.



Let's take a few moments to go over the form. First off, the data grid at the bottom of the form shows you all the riders that are entered in the event, along with their row, class and score. Under the Entries group box, you can filter your riders by class using the Class Filter pull down box. If you want to view all riders, then select the <blank> option at the top of the list. You can sort by name, class, or row by using the Sort pull down box. You can view or edit a rider's scorecard by either typing in their row and then hitting enter, or by clicking the [View/Edit Scorecard] button. You can also double click on a rider in the rider view data grid to bring up their scorecard.

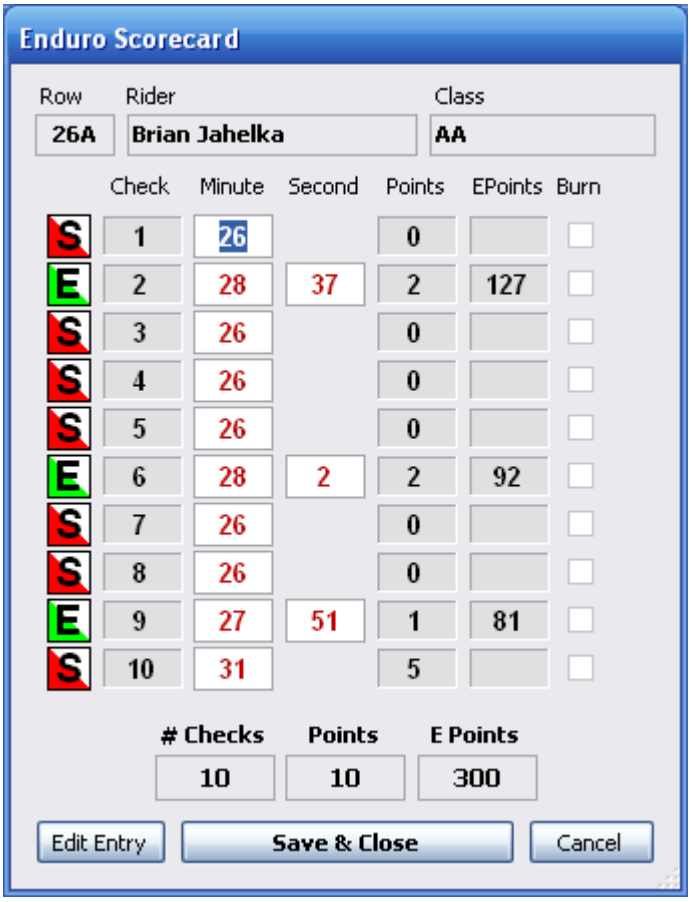


Define Check Points

The buttons in the upper right area of the form are fairly self-explanatory, but let's talk about them in a little bit of detail. The *[Define Checks]* button brings up a form that allows you to (surprise) define the checks for the event. You must define the checkpoints before you can view/edit the scorecards! Simply type in the check number, select the check type (or better yet, type the first letter of the check type to select it), and do this for each check. If you need to delete a row, just click the row header to select the row and hit delete. Like usual, the

Check number is a unique identifier, so you can't have two check 1s for example. Note also that you must do this for each course length! After you have defined checks for the first course, then select any other course lengths you might have in the list box at the top of the form and define the checks for them as well. Note that you do not want to check the ThrowOut box, or those checks will not be used to calculate the riders' scores! This jumps us ahead to a subject that you might be interested in later. If a check (or checks) needs to be thrown out, this is where you do it. If you do need to throw out a check, remember that you must check the ThrowOut box on each course length that it applies to (note: you MUST re-calc scorecards after throwing out a check).

Enduro Scorecard



Before we get into calculating places and results reports, let's go over the rider's scorecard. After you have entered the rider's row number, or double clicked on their name in the riders data grid view, the scorecard form will appear. Enter the minutes and/or seconds for each check into the available text boxes. You may use enter or tab to move to the next field (tip: shift-tab moves you backwards). As you type in the rider's check times, their score for each check and the total will update. When you get to the last check, you can hit enter or tab one last time and focus will move to the [Save & Close] button where hitting enter will save the scorecard and close the form, getting you ready for the next scorecard. At this point, I circle the total number of checks on the scorecard, write down the total points and emergency points, and then hand the scorecard off to be hung up for viewing.

Calculating Places

Once you have all the scorecards entered in, we can then talk about the *[Re-Calc Scorecards]* and *[Calculate Places]* buttons. Recalculating the scorecards is something you should only need to do if you throw out a check. Basically, what this button does is re-calculates the points lost at each check and re-totals the points for each rider, taking into account any thrown out checks. Since the rider's points lost at each check and total points are calculated on the fly as you type in their scorecard, you don't need to use this button unless you have thrown out a check. Now, the [Calculate Places] button is different. You will need to use it anytime after you change some riders' scorecards, and before you print results! It will look at the riders' total scores and figure placements in each class and overall class.

Results Reports

After you have calculated places, you may then view the results reports. Clicking the *[Class Results Report]* button will bring up a report that is grouped by class, ordered by place, and has all the check detail and total points. This is the report you will want to print out and hang with the scorecards. There is also a *[Results Summary Report]* button that will bring up the results grouped by class, but it will not contain the check by check breakdown, and will not take into account the overall placements.

Scoring a Brand X Enduro

Brand X enduros are similar to regular timekeeping enduros, except that when a rider is late (or early), they assume a new minute based on their arrival time. For example, if a rider (starting on row 10) arrives at the second check at minute 12, the rider would assume that new minute and would be "on time" if they arrived at the third check on minute 12.

Scoring is fairly straight forward until a check has to be thrown out for some reason. A check could be thrown out because the mileage was off, or because the check clock (or flipcards) were off, or because of a course marking problem that had a substantial percentage of riders missing the check all together. Outlined below are some examples along with explanations of how to handle these cases with MotoTally in order to get your event scored properly.

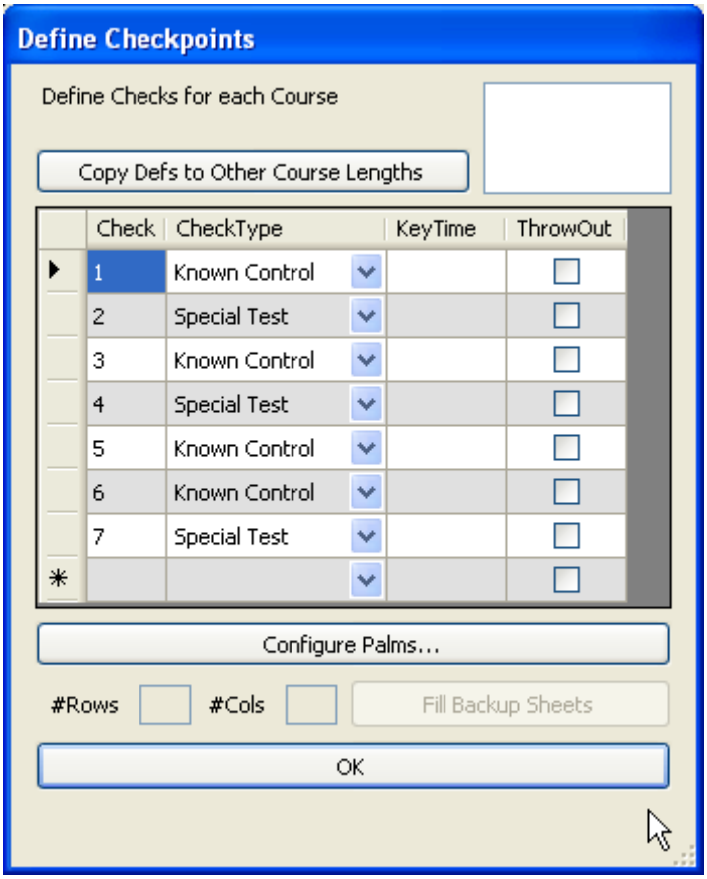
Two Ways to Throw a Check Out

1) Throw Out per AMA Rules – When a check gets thrown out, it reverts to an observation check. This means that no penalty is assessed for early/late arrival, but the rider will take on the minute that they arrived. Note that the rider MUST HAVE a score for a thrown out (now observation) check in order to be scored beyond the check!
2) Remove the check all together from the Check Definitions – If you have a situation where a significant percentage of the riders completely missed a check, then technically you can't throw the check out according to AMA rules and have it revert to an observation check. An observation check means that the rider had to go through the check in order to get credit for subsequent checks. If you had a bunch of riders miss the check, then technically, they should not be scored for subsequent checks. In this case, simply delete the check from the check definitions (select the row header and hit delete).

Scoring an ISDE/ISDT Event Manually (Score Cards & Backup Sheets)

Scoring an ISDE/ISDT style enduro is very similar to the methodologies described above in the "Scoring an Enduro Event" section, so make sure you have read that first. There are some subtle and not so subtle differences, and we cover them next!

Define the Check Points



Traditional enduros have several different types of checkpoints (known controls, secret checks, emergency checks). Qualifier (ISDE/ISDT) enduros have known controls or time checks and special tests. Known Controls and Time Checks are scored the same way. The only difference is whether or not you are going to use flip cards at these checks. If you are using flip cards, then you want to use a Known Control CheckType. If you are recording time of day, then you want to use the Timed Check CheckType. Special tests are, well, a little "special" in that they are actually two physical checkpoints, an "IN" and an "OUT" (or begin and end if you prefer). In order to determine the elapsed time for the special test, you must record an "IN" time and an "OUT" time. The difference between the in and out time will be the elapsed time for the special test. When you have a special test, you will define this as a single check in MotoTally.

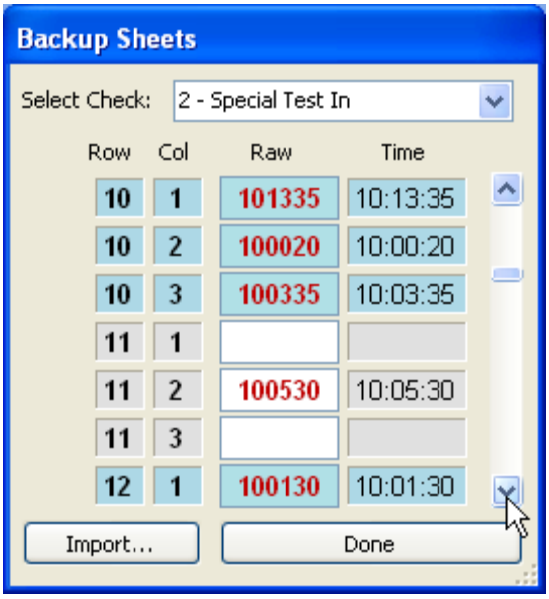
Just like scoring a traditional enduro, you must define checkpoints before you can start entering scorecards. For all CheckTypes, you must fill in the check number and the CheckType. For "Timed Checks" you must also fill in the "KeyTime". The KeyTime is the time of day that a rider on row zero is due and should be entered in the format "hh:mm".

Setup the Backup Sheets

MotoTally is set up to allow you to enter check data directly off specially made backup sheets. These backup sheets are setup such that the bike numbers are in order and the user simply enters a time for the rider after their number. Please read the last sentence again. The advantage of doing your backup sheets in this manner means that the data is already in a set order, and you can then easily enter that data in a pre-ordered form in MotoTally without having to enter the bike number!

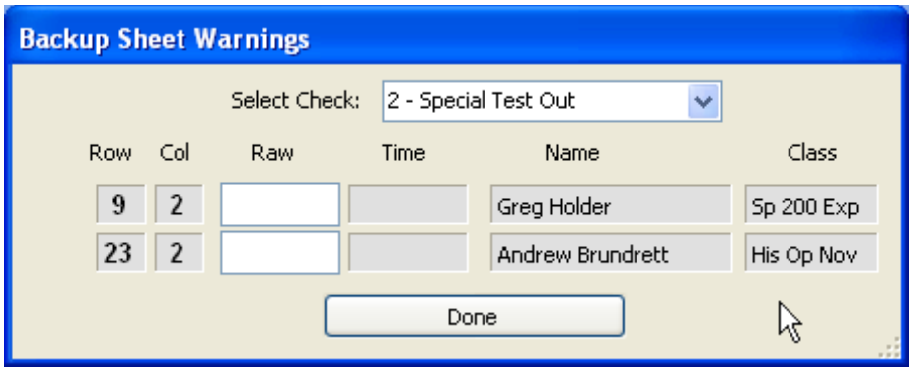
You also need to "Fill Backup Sheets" which will create internal tables to allow you to enter check times off your backup sheets. Enter the maximum number of rows and columns you have in this event. For example, if at most you have riders up through row 42, then enter in 45 or 50 in the #Rows box. This will allow a little buffer in case you get some late entries. If you have at most 3 riders to a row, then enter 3 into the #Cols box. Then click the [Fill Backup Sheets] button to create the internal backup sheets to match your paper backup sheets.

Backup Sheet Data Entry



To enter in scores/times off your backup sheets, click the *[Backup Sheets]* button to bring up the Backup Sheets form. Select the check you wish to enter in scores/times for. The records below will update with that check's data. Note that the first two columns, Row and Col will show the row number and column number for which time you should enter in the "Raw" box. So, if you have bike number 210 (row 10, column 2), you would enter that data on the same line that has 10 in the "Row" box, and 2 in the "Col" box. Of course, the order on this form is the same as on your backup sheet, so all you should need to do is go down the list and punch numbers in. For the known controls, you need only time in the minute of the rider's arrival. For the special tests, you need to type in a time. In order to expedite the data entry, you need not type any colons in your times. Just type the numbers in the "Raw" box, and MotoTally will figure out what the hours, minutes, and seconds are and place the properly formatted time in the "Time" box. When you are done with your first backup sheet, just select the proper check and start typing in data off the next backup sheet. If the "Time" box is blank after you type in a time, then your time is not formatted correctly and MotoTally doesn't know what to do.

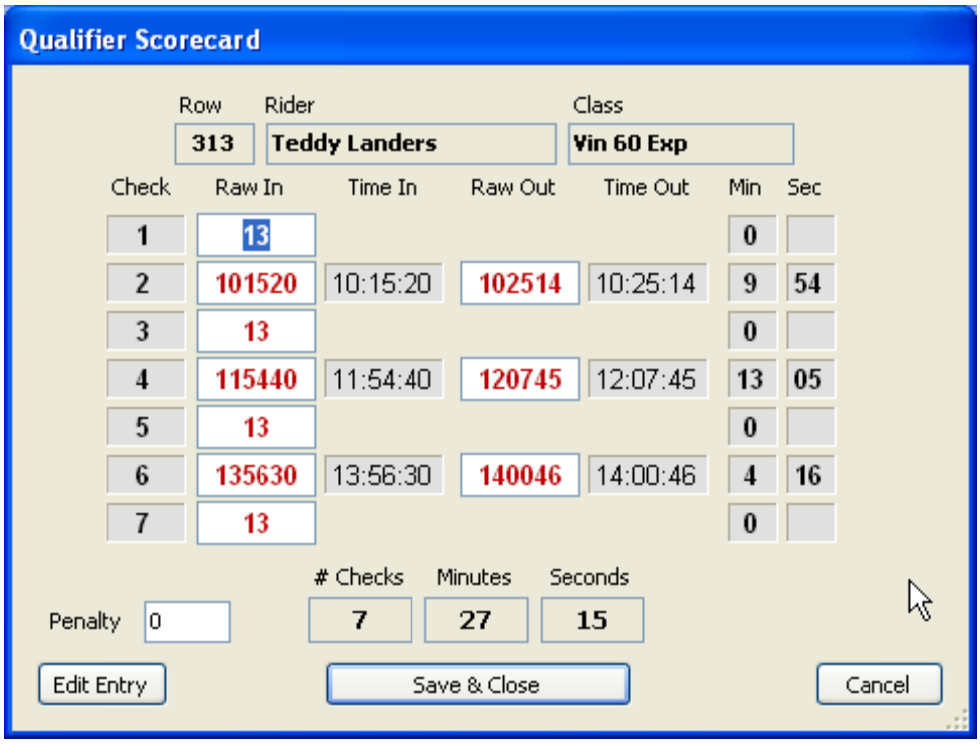
Backup Sheet Warnings



After you have entered in all of the backup sheets, or even, after you have entered in times for an "in" and an "out", you can check for missing times by clicking the [Warnings] button. This form will warn you of anything that MotoTally finds peculiar. First off, much like the Backup Sheet form, you must select the check you want to get warnings for. Referencing the screen shot above, the two gentlemen shown have a time "in" for special test #2, but as you can see, they have no "out" time. You could either re-check your backup sheets to see if you missed it, or wait till the scorecards come in and type in the time off of them. You can fix these warnings just like on the backup sheet simply by typing in the "Raw" time (not formatted with colons) and MotoTally will automatically format the time for you. In addition to checking for missing special test times, MotoTally can also check for missing known control times. If you get a warning on a known control, that means that there is scoring data for the rider after the known control selected, and it is expecting that since the rider has a score for later on, there should be a time at this check. Again, the "Backup Sheet Warnings" screen basically warns you when it finds missing data.

The ISDE/ISDT Scorecard

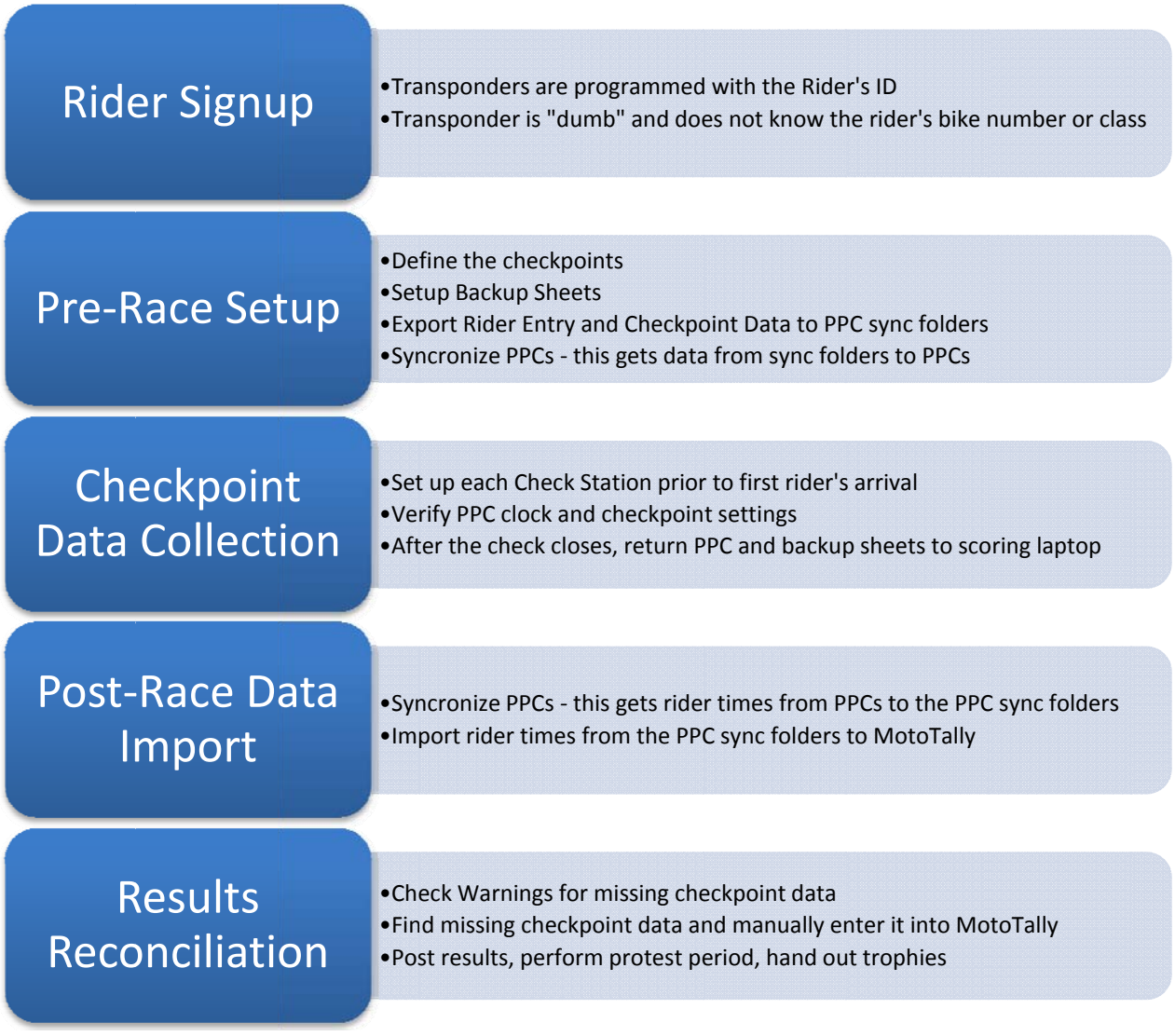
In addition to the ability to enter data in on the backup sheets and warning screens, you can also look enter data in on a per rider basis straight off their scorecard. Either type in their row number in the "Row/Col" box and hit enter, or select their name in the rider grid in the bottom half of the Enduro Scoring & Results screen and click "View/Edit Scorecard". Just like the Backup Sheets and Warnings forms, you can type raw times in without the formatting colons and MotoTally will format the time properly for you. At the bottom of the screen you can also see the number of checks the rider will get credit for, along with their total score in minutes and seconds.



Scoring an ISDE/ISDT Event (with Check Stations & Transponders)

Introduction

ISDE/ISDT events are extremely difficult to score because of the huge amount of data that is required to determine a rider's final score. Scoring an ISDE/ISDT event with the use of MotoTally check stations and transponders is a great way to eliminate the huge amount of data entry required to score these types of events. While nearly eliminating data entry requirements and the typos that go with, scoring these types of events with check stations and transponders does add to the complexity of the process. Let's spend some time going over the process as a whole. The better you understand the process the better you will be able to deal with exceptions and handle things when they go wrong. Please make sure you have read and understood the previous section on scoring an ISDE/ISDT event manually as most of the process is similar.


Rider Signup
•Transponders are programmed with the Rider's ID
•Transponder is "dumb" and does not know the rider's bike number or class
Pre-Race Setup
•Define the checkpoints
•Setup Backup Sheets
•Export Rider Entry and Checkpoint Data to PPC sync folders
•Syncronize PPCs - this gets data from sync folders to PPCs
Checkpoint Data Collection
•Set up each Check Station prior to first rider's arrival
•Verify PPC clock and checkpoint settings
•After the check closes, return PPC and backup sheets to scoring laptop
Post-Race Data Import
•Syncronize PPCs - this gets rider times from PPCs to the PPC sync folders
•Import rider times from the PPC sync folders to MotoTally
Results Reconciliation
•Check Warnings for missing checkpoint data
•Find missing checkpoint data and manually enter it into MotoTally
•Post results, perform protest period, hand out trophies

The basic idea here is that we will use RFID transponders and check stations to electronically collect the departure or arrival time of the rider at each check. In order for this to work reliably, several things need to happen. At signup you must program a transponder for each rider. The rider must mount the transponder on their person properly. You must then define the checkpoints for the event, and get this information along with the rider information synced on to each Pocket PC (PPC) that goes in each check station. Each check station

must be transported to the check location, set up properly, and tested for good operation. After each check closes, the PPCs (and backup sheets) are brought back to the scoring laptop where they are synced again. The check point data that was logged by the PPCs then must be imported into MotoTally. If you had 100% read rates all day long, your job would be basically done at this point, but chances are, you are going to have some missed reads (lost or improperly mounted transponders are the biggest culprit). So you will have to identify this missed data and reclaim it off of your backup sheets. Finally, after missing data is supplied you can print out the results.

Rider Signup

Riders are signed up for the event just as they normally are, and must have their transponder programmed at that time. MotoTally stores a RiderID on the transponder. This RiderID is just an internal number that is associated with each rider and is unique among riders. Indirectly what this means is, the transponder is "dumb" and only knows that RiderID. It does not know or care what class the rider is entered in or what row the rider is riding on. This is a GOOD thing. What this means is that this transponder is married to that rider, and will never need to be re-programmed from event to event. Information like class and bike number are stored in the MotoTally database, and when MotoTally needs to know what the class or bike number of the rider is, it can simply look that up in the entry info. This method is also great in that if the rider changes classes or bike numbers, that information can be changed in MotoTally with no need to re-program the rider's transponder.

Pre-Race Setup

Before you can do checkpoint data collection, several things need to happen. You will need to set up your backup sheets, define your checkpoints, export rider entry data and checkpoint data to the PPC sync folders, and then sync your PPCs with your computer. I will go over these tasks in more detail now.

Define the Check Points

MotoTally needs to know how the check points will be laid out on the course in order to score the event. You will need to define these checks before you can set up your PPC check stations. Most of the information you need to know to do this has been covered in both the Enduro and ISDE/ISDT sections. Please check those sections if you need more detail on how to do this.

Setup Backup Sheets

Scoring an ISDE/ISDT event with Check Stations and Transponders means you won't have to enter in all of your check point data manually, but it does not change the fact that you still need to define your backup sheets! MotoTally uses the same method to calculate the results whether you are using transponders or not, so it still needs to be set up the same way. Again, please reference the previous section for information on how to setup your backup sheets.

Setup Pocket PCs

The PPCs are the heart of an RFID Check Station. The PPC accepts data from the RFID reader when a transponder is read from the antenna. Remember that the transponder is programmed with a RiderID. This RiderID is consumed by the PPC and it along with a date/time stamp is logged to a file on the PPC. In addition to this most basic task, the PPC is also attached to a display and wishes to display the rider's bike number and time on the display. In order for the PPC to do its job properly, it requires some initial setup.

Pocket PC Configuration Files Overview

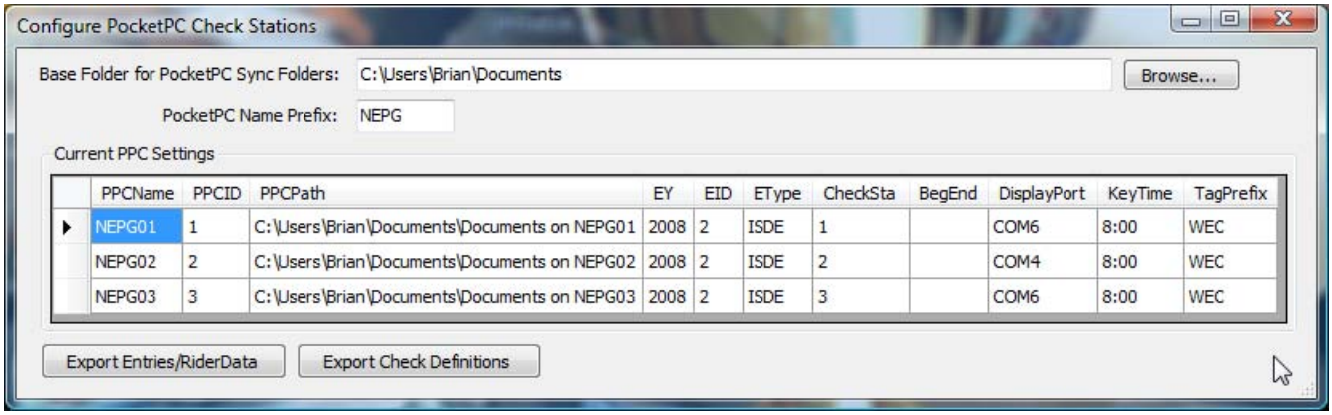
All of the information that the PPC needs is contained in two separate files.

The first is the MTRiderData.txt file. This file provides the PPC with the information it needs in order to translate a RiderID into a Bike# (or Row#). It is quite simply a list of everyone entered in the event with their RiderID and Bike#. The PPC uses this list as a lookup table to determine the bike number of a given RiderID. Obviously, this file cannot be created in its entirety until the signup process is complete. With signup generally being open till right before the race starts, it might be difficult to perform this operation in time to get the first few PPCs out to their check stations! Be assured, that the PPC will still collect all of the data that is needed regardless of whether it has a complete MTRiderData.txt file or not (remember, the RiderID is on the transponder and all we are storing in the check data file is the RiderID and a date/time stamp). What will suffer is the ability for the PPC to display the Bike# on the display. So, if the PPC can't find a matching RiderID in the MTRiderData.txt file, it will display the RiderID instead of the Bike#.

The second is the Settings.txt file. This file is read by the PPC on startup. It gives the PPC some check definitions information that it requires in order to know what it is you want to do. Some of the pieces of information that are stored in the Settings.txt file are things like the EventYear, the EventID, what the number of the check is, what type of check it is collecting data for, and what the transponder's tag prefix (or password) is.

Pocket PC Configuration File Creation

MotoTally will create these files for you and place them in the PPC sync folders with the click of a few buttons. First, open up the PPC configuration screen by going to the Enduro Race/Results screen. Up top on the menu bar, select Pocket PC Check Stations → Pre-Race Configuration. You will be presented with a form that looks a little bit like the one below. The first thing you need to do is select the base folder where the PPC Sync folders are. This is by default your "My Documents" folder. On Windows XP machines, this is by default the "C:\Documents and Settings\<user name>\My Documents\" folder. On Windows Vista machines, the default directory is the "C:\Users\<user name>\Documents\" folder. Finally, you need to let MotoTally know what prefix you used when you named all of your PPCs. Each of your PPCs should have the same name followed by a two digit number specifying the PPCs ID (e.g. NEPG01, NEPG02, NEPG03, etc). Enter the *PPC Name Prefix* in the field and then the *Current PPC Settings* data grid will update with any existing settings it was able to find.



PPCName	PPCID	PPCPath	EY	EID	EType	CheckSta	BegEnd	DisplayPort	KeyTime	TagPrefix
NEPG01	1	C:\Users\Brian\Documents\Documents on NEPG01	2008	2	ISDE	1		COM6	8:00	WEC
NEPG02	2	C:\Users\Brian\Documents\Documents on NEPG02	2008	2	ISDE	2		COM4	8:00	WEC
NEPG03	3	C:\Users\Brian\Documents\Documents on NEPG03	2008	2	ISDE	3		COM6	8:00	WEC

As you can see in the screen shot above, MotoTally found settings in three PPC sync folders. Each line on the grid shows you what information it found in the Settings.txt file. At this point clicking on the Export Entries/Rider Data will create the MTRiderData.txt file and put it in each of the PPCs' sync directories. Then you need to click on the "Export Check Definitions" button and the Settings.txt file for each PPC will be updated with the data for this race.

Let me take a moment to explain why each of these pieces of data are stored in the PPC's Settings.txt file. First, EY (EventYear), EID (EventID), CheckSta (Check #), and BegEnd are used to *name the file* that the check data is written to. This makes it easy for you to determine which file contains the data for which event and

check. The EType (EventType) tells the PPC what type of event you are scoring. For all event types, MotoTally stores the check data the exact same way, with a RiderID and a date/time stamp. The EventType is however needed so that the PPC knows what type of information to put on the display after a transponder read. For example, at a traditional enduro check point (Secret, Emergency, or Known Control), we want to show a flip card time. For a Time Check or Special Test, we want to show the time of day. The DisplayPort field tells the PPC which com port it should use to send information to the display. This should be set once on the PPC and not change, but it is shown here regardless. The KeyTime tells the PPC what the due time for a rider on row zero is. This is only used for secret, emergency, or known control type checks, otherwise it is ignored. Finally, the TagPrefix shows you what password the PPC will look for on the transponder to verify that it was programmed by you! If the TagPrefix doesn't match when a transponder is read, it will still record a data/time stamp, but it will place an "x" in front of whatever was read off the transponder so that it won't get confused with a valid RiderID that you programmed.

One final and very important note, MotoTally is not smart enough to set the Check Station numbers properly yet for an ISDE/ISDT type event. It can set up everything else, but you will be required to (for now) go into the settings on each PPC and manually set the Check Station number, along with a "Beg" or "End" in the BegEnd field if you are running a Special Test.

Pocket PC Synchronization

After you have exported the MTRiderData.txt and Settings.txt files to the PPC sync folders, you are most of the way there! This data has been exported and exists on your computer, but all this setup won't do you any good unless you get this data on each PPC! You must now sync up each of your PPCs with your computer. This (should) put these new configuration files on the PPC. For whatever reason, syncing files between your computer and your PPCs does not always work the first time (I blame Bill Gates!). I like to check the dates of these two files on my PPC before I take it out to the checks just to make sure that everything has synced properly.

Checkpoint Data Collection

Once you have all of your PPCs synced up with your computer, you are ready to take them out to their respective checkpoints and get them hooked up and ready to start reading transponders.

Check Station Setup

Here is the startup process for getting a check station ready to go:

1) Plug antenna into the check station
2) Plug display into the check station
3) Turn the RFID reader on
4) Turn the display on
5) Plug PPC into the check station (RFID on the bottom, display on the top)
6) Perform a soft reset on the PPC (use stylus to press reset button on the bottom of the PPC)
7) Once booted, start the MotoTally CheckStation software program on the PPC
8) Check the settings in MotoTally CheckStation to ensure that everything is setup properly
9) Test your read distance with a test transponder to verify proper operation of the check station

Post Race Data Import

Once your checkpoint has closed, it is in your best interest to get both the PPC and the backup sheets returned to scoring central as quickly as possible! This will give you time to import the data, do validity checks, and chase down any missing data.

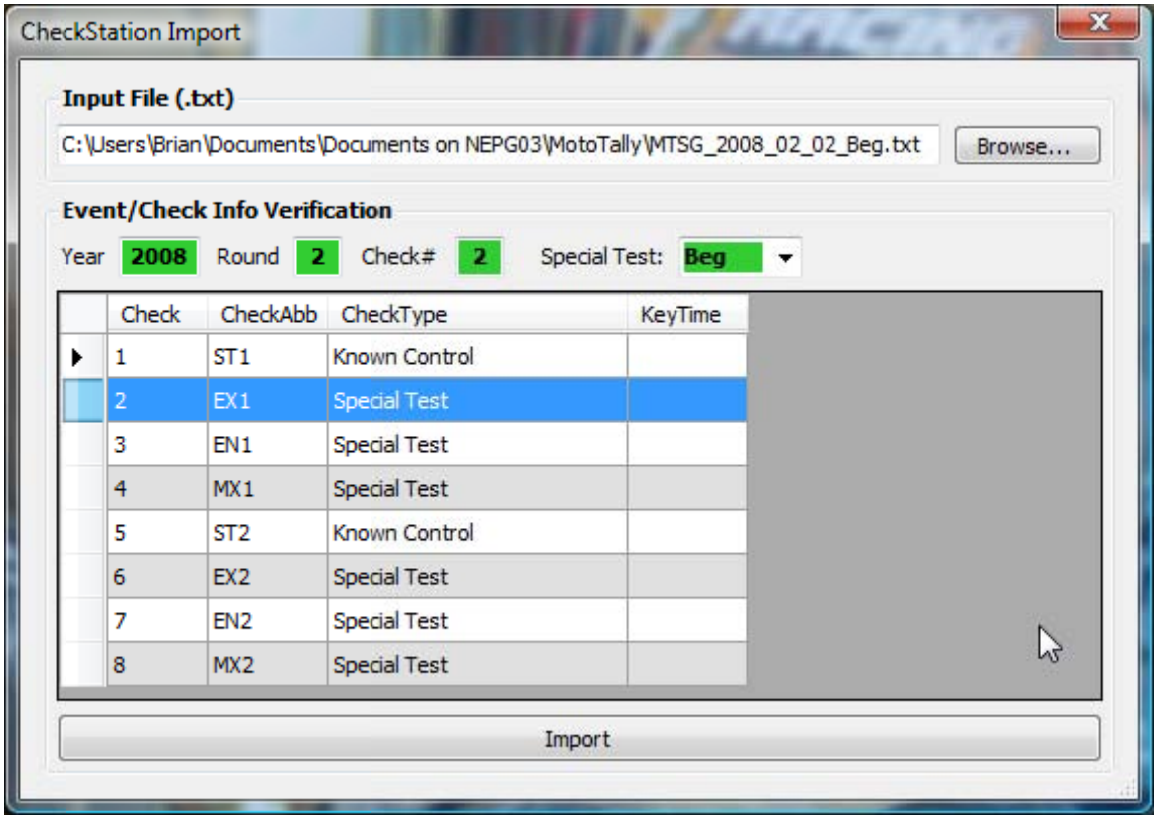
Pocket PC Synchronization

Just as you did during the setup of the PPC, you will now again need to sync your PPC with the computer. This will bring the check station data file over to the sync folders on your computer. The name of the file will be built based on the MotoTally CheckStation settings. Remember that you specified the following data in the Settings.txt: EventYear, EventID, Check Station #, and (if the check was a special test) the BegEnd. The file is named according to the following format: MTSG_YYYY_EE_CC.txt. MTSG will always start the file name (Moto Tally Scoring Gate). The YYYY will be the 4 digit EventYear. The EE will be the two digit EventID. And the CC will be the Check Number. If this was a special test, then the file name format will also have a "_Beg" or "_End" added on to the end of the filename. So as an example, a file with the name "MTSG_2008_02_03_Beg.txt" would be the check point data for EventYear 2008, EventID 2, Check 3, with the "Beg" specifying that this is the data for the start of the special test.

The file is named this way to help you make sure you import the correct file into the correct check! Pay close attention to these numbers and the file name format.

Check Data Import

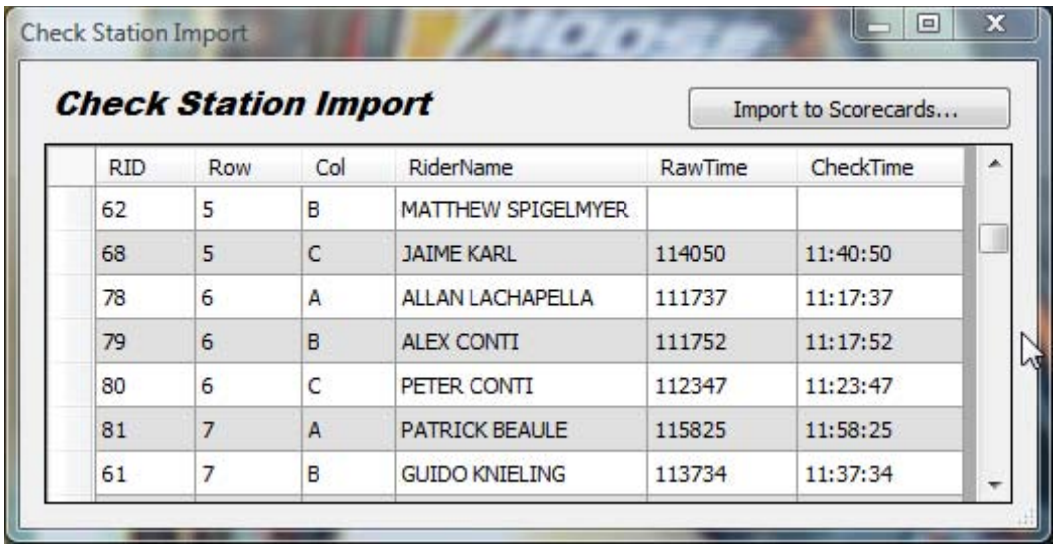
Once you have synced up one or more PPCs with your computer, you should have check data files in the PPC sync folders that are ready to be imported into MotoTally. From the menu bar, select Pocket PC Check Stations → Post-Race Import.



Click [Browse…] to select the file you wish to import. Again, the base folder for all of these PPC sync folders is in your "My Documents" folder. From there you have a folder for each PPC that is set up to sync with your computer. In the directory for each PPC you will find a directory named "MotoTally", and within that directory you will find your check data file.

Once you have selected the check data file you wish to import, MotoTally will do some verification on the file name to make sure it matches up with the current EventYear, EventID, and the currently selected check in the data grid. If everything matches up, you should have all green boxes like you see in the screen shot. If something is out of whack, MotoTally will let you know by making the background of any one of those boxes red. So if you see a red background, you might want to double check everything before you go importing stuff!

After clicking on the [Import] button, MotoTally will read in all of the data in that file and present you with the following screen:


Check Station Import
Check Station Import
Import to Scorecards...
RID Row Col RiderName RawTime CheckTime
62 5 B MATTHEW SPIGELMYER
68 5 C JAIME KARL 114050 11:40:50
78 6 A ALLAN LACHAPELLA 111737 11:17:37
79 6 B ALEX CONTI 111752 11:17:52
80 6 C PETER CONTI 112347 11:23:47
81 7 A PATRICK BEAULE 115825 11:58:25
61 7 B GUIDO KNIELING 113734 11:37:34

This is a preview to let you know what data was read in and matched with the entry data. You should have a time recorded for everyone that made this check. You can review this data, and then click the [Import to Scorecards…] button to finally bring this data into MotoTally. If you have more check station data to import, you can repeat the process until all of your data has been imported.

One final and very important point, after you read in any check point data, you ***must*** click on the [Re-Calc Scorecards] button! This will recalculate everyone's scorecard based on the new data that you have imported. Finally, to calculate class placements based on this new check data, you must also click on the [Calculate Places] button.

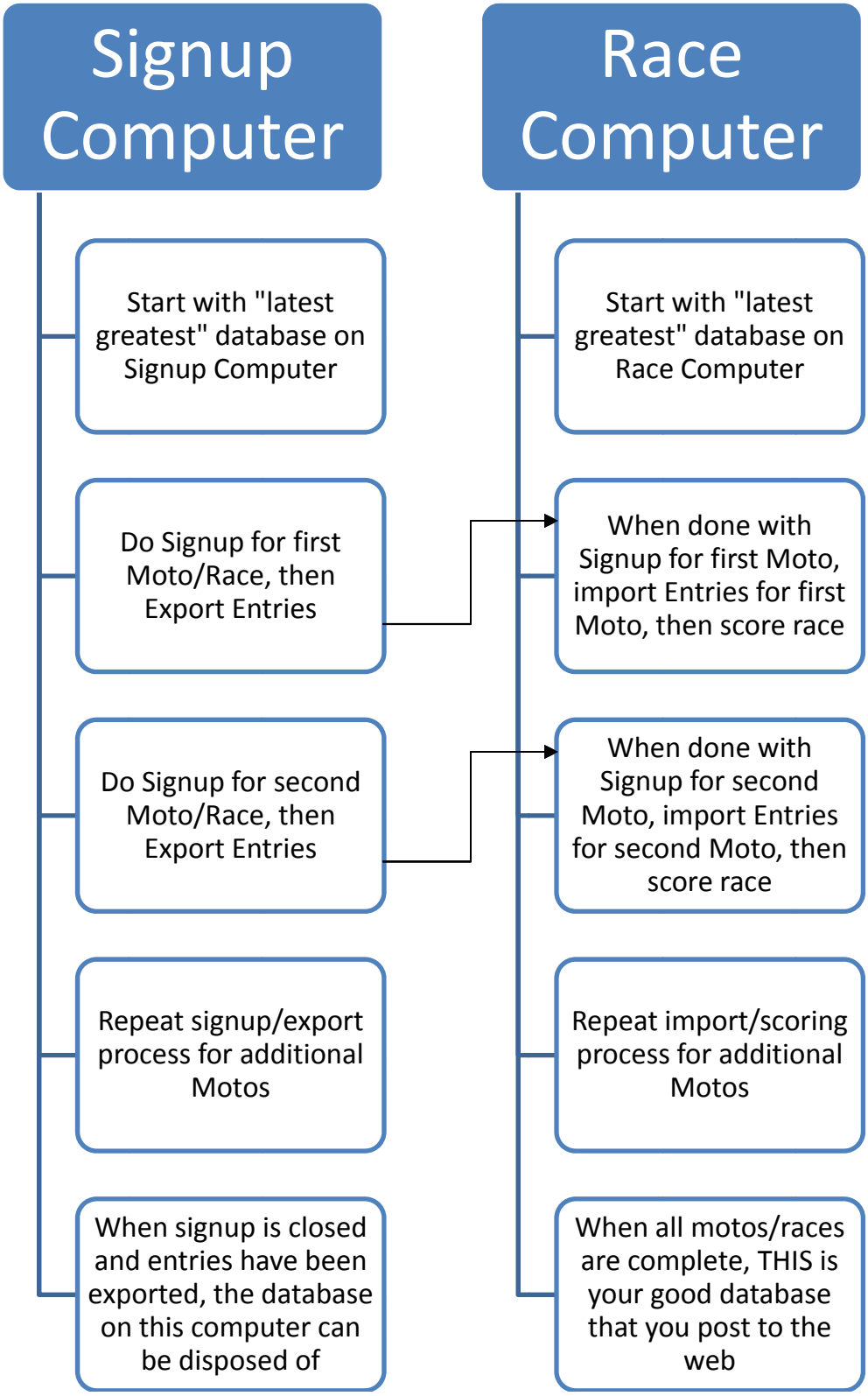
Results Reconciliation

Yet to come…

Checking Warnings

Yet to come…

Appendix A – Multiple Moto Hare Scramble Entry Export/Import Process

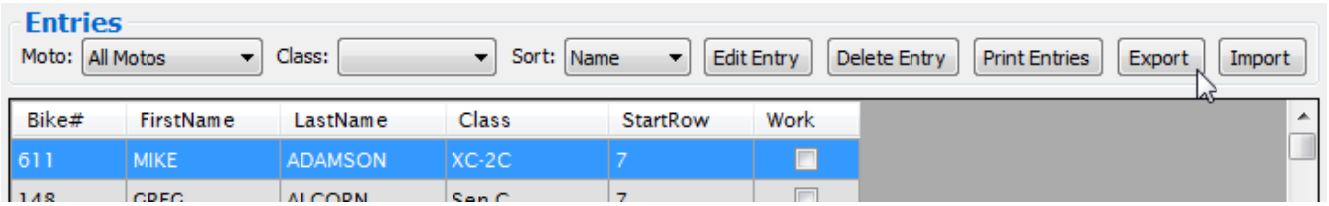

Signup Computer
Race Computer
Start with "latest greatest" database on Signup Computer
Start with "latest greatest" database on Race Computer
Do Signup for first Moto/Race, then Export Entries
When done with Signup for first Moto, import Entries for first Moto, then score race
Do Signup for second Moto/Race, then Export Entries
When done with Signup for second Moto, import Entries for second Moto, then score race
Repeat signup/export process for additional Motos
Repeat import/scoring process for additional Motos
When signup is closed and entries have been exported, the database on this computer can be disposed of
When all motos/races are complete, THIS is your good database that you post to the web

Appendix B - Importing/Exporting Entries

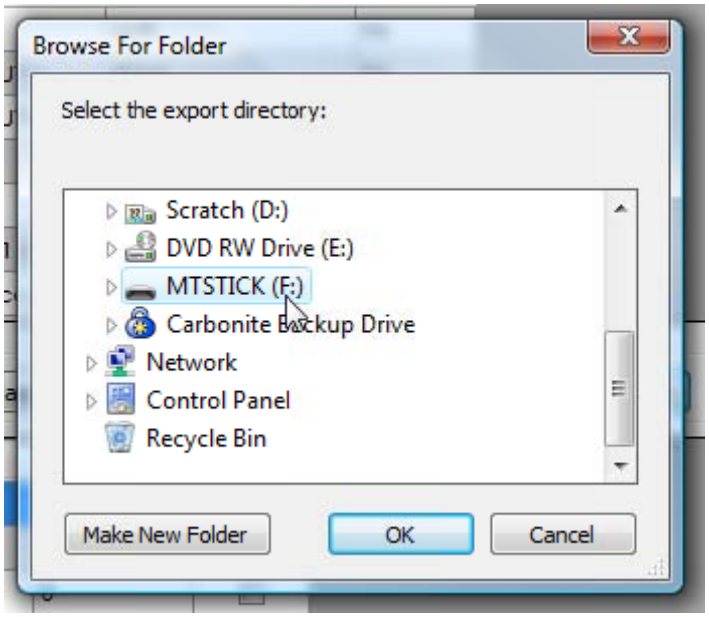
There may be certain situations where you need move or copy entries from one location to another. For example, you may be running a hare scramble event with multiple motos and need to keep signup open in one location while scoring the motos in another location. In this case, you will set up on computer at signup connected to one copy of your database, and another computer at the scoring lane connected to another copy of your database. Another example might be where you are having a two day event, and you want to copy the riders from Day 1 over to Day 2. The import/export entries features of MotoTally allow you to do this.

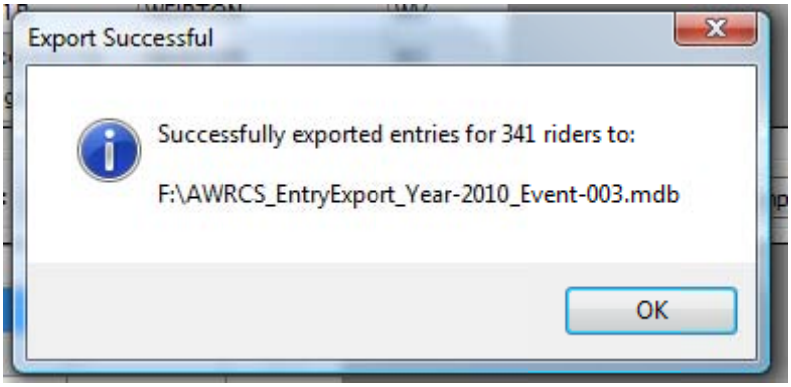
Here is the basic overview of how this will work. Before you start signup, put the copy of your (latest and greatest) database on both your signup and race computers. Run signup until you are ready to start the first moto (and everyone that is racing the first moto is signed up). At this time, export the entries from your signup computer. This will create a new export database that contains just the riders and entries that you have signed up so far. Take this database over to your race computer (a USB memory stick would be handy). On your race computer, import the entries from your export database. Your databases will now by synced up and you can run your first moto. You will repeat this process before the start of each moto as the day goes on. It is very important to make sure you use your signup computers ONLY to perform signup operations, and use the race computer ONLY to run the races. If you don't adhere to this method of operation, you could have very weird and unpredictable results. It is also critical that you get your entries imported properly before running a hare scramble race!

Exporting Entries

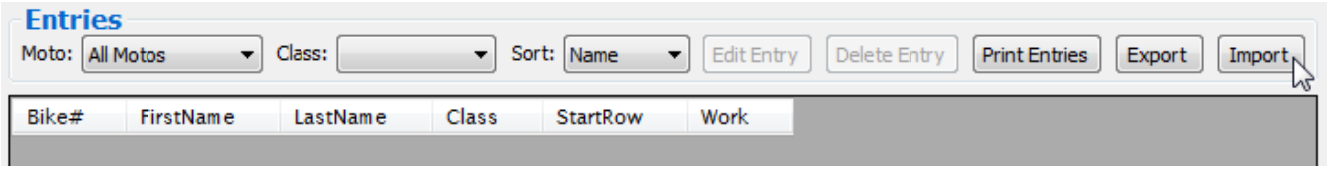


To export the entries from your signup computer, go to the signup screen and click the Export button (or right-click on the Entries grid and select Export Entries to Another MotoTally Database. This will bring up a context sensitive menu. Select the [Export Entries to another MotoTally database] option.) MotoTally will then export *all* Entries for the current event, and all of the associated Rider data to a new Access database. By default, the new export database will be placed in the same directory as the MotoTally database you are currently connected to, or you can select the location where you want the export database stored (like on your memory stick). The name of the database will be the same as your current MotoTally database, but will have the event year and event ID added on to the end. See the screen shot below as an example.

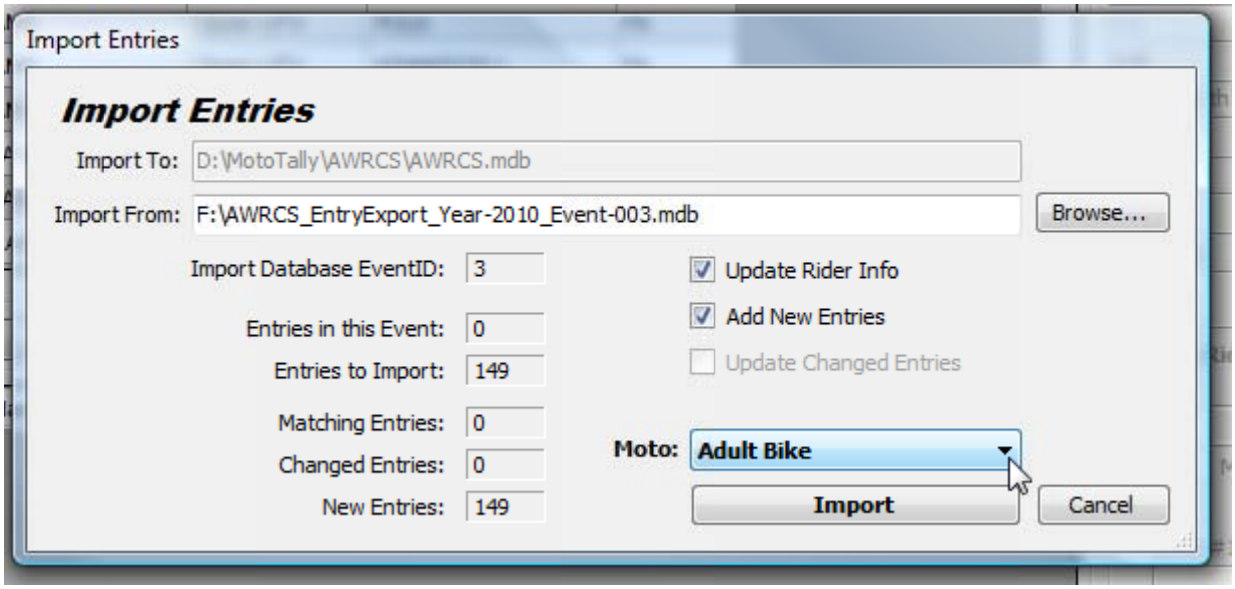




Importing Entries



Move the entry export database over to your race computer (a USB memory stick would work great). To import entries to your race computer from the export database, go to your race computer's signup screen and click the [Import] button (or right click on the Entries grid selecting the [Import Entries from another MotoTally database]. The Import Entries form will pop up.



By default, MotoTally will look in the same directory that your database is stored in for the entry export database. If it can't find it there, it will prompt you to browse to the location that it is stored. If you are importing entries for a Hare Scramble type event that has multiple motos/races, you MUST SELECT the moto/race that you want to import entries for! Once you have selected the export database that you want to import from (and selected a moto), MotoTally will analyze both databases and determine some statistics for you. These statistics show up on the Import Entries form. *Entries in this Event* is the number of entries that already exist in the current MotoTally database that you are connected to. *Entries to Import* is the number of entries that exist in the entry export database. *Matching Entries* is the number of matching entries that exist in both databases (perhaps from a previous export/import operation). *Changed Entries* is the number of entries that exist in both databases, but do not match (e.g. a rider's class or bike number was changed since

the last export/import operation). *New Entries* is the number of new entries that are not yet in the current MotoTally database. These statistics are provided to help you make sure you are using and connected to the right databases before you commit to the import.

When importing entries, you have some options. I would recommend however, that you leave all of the options checked to make sure your signup and race databases are synced up properly. You can update rider info, add new entries, and/or update existing entries. The Update Rider Info option is always available. It will update all information specific to the rider (like their name, address, etc.). The Add New Entries option is available only if you have some new entries. And the Update Changed Entries option is available only if you have some entries that have changed. Click the import button to perform the tasks that you have selected.